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THE NEW YORKER

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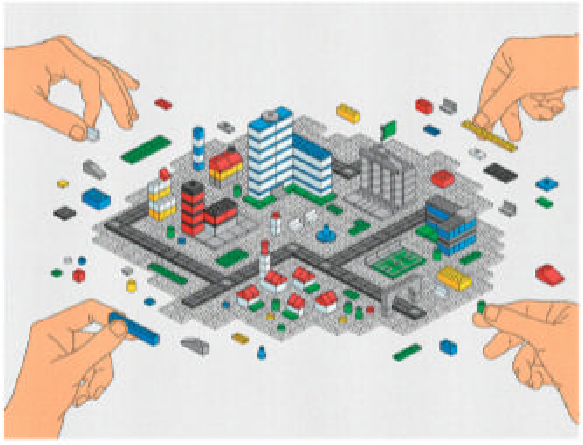
THIS WEEK ON NEWYORKER.COM



CURRENCY

Nick Romeo on participatory budgeting, a system in which citizens tell the government how to spend its money.

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Sarah Larson writes about Audie Cornish's vision for redefining what news can be with her podcast from CNN.

LEFT: ÁLVARO BERNIS; RIGHT: IKE EDEANI

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THE MAIL

STATION TO STATION

As someone who used to commute through Penn Station, I appreciated William Finnegan's piece about the transit hub and its troubles ("The Way Things Work," March 13th). In 2012, I moved from Brooklyn to suburban New Jersey. I work in urban planning; at the time, I described my new town as a planner's paradise, owing to its walkability and to the fact that my journey to my midtown office seemed to be only about ten minutes longer than it had been when I was taking the subway. Over time, however, the extra ten minutes became an additional half hour, thanks to frequent delays caused by downed wires, signal troubles, and stalled trains. Because of this, when my office called us back to work in person, I decided to find a local job.

Conditions like these are not inevitable in metropolitan areas. For instance, the town of Reading, England, is forty miles from London, and a twenty-five-minute train ride away. In comparison, my town is eighteen miles from midtown, and yet a commute on a good day—one without delays—would take around an hour and fifteen minutes. If New York City-area workers had shorter and more reliable commutes, far more people would likely be heeding the post-pandemic call to return to the office.

Daniella LaRocco
Maplewood, N.J.

VIOLENT CONTENT

Anthony Lane almost always gets a laugh out of me, but, as I read his review of "Cocaine Bear," my usual enjoyment was replaced by anger toward Jimmy Warden and Elizabeth Banks, the film's writer and director, respectively (The Current Cinema, March 6th). I am a longtime resident of Montana, where our trophy-hunting current governor has promoted brutality toward wildlife by killing nonhuman animals in cruel and archaic ways. I have read that Warden and Banks felt empathy for the real bear on whom their story was based, but, when I watched the trailer, the film looked to me like just one more depiction of gratuitous violence produced to make a profit. I hope that Lane's assessment of this clichéd fantasy has persuaded filmgoers to spend their money elsewhere.

Kristine Ellingsen
Gallatin Gateway, Mont.

MACHINES IN MIND

Dhruv Khullar's piece about applications of A.I. in mental-health care made me wonder if society might become overly reliant on A.I. ("Talking to Ourselves," March 6th). I can think of many innovations—such as cars and antibiotics—that, despite their initial promise, have gone on to cause harm because they have overshadowed good alternatives. As Khullar suggests, A.I. would ideally have a meaningful role in a large and robust mental-health ecosystem, providing the right level of service for some patients at certain points in time, a supplement to human-provided care for others, and a useful source of support for professionals.

Ellen Beckjord
Pittsburgh, Pa.

I am a parent coach and a people person, and my initial reaction to Khullar's article was fear: will A.I. make me obsolete? Once I read all of it, however, I changed my mind. We already live in a world in which many of us interact with nonhuman helpers every day. I have multiple sclerosis, and typing is challenging for me. As a result, I regularly use speech-to-text technology, like Siri (which is usually a great stenographer). It's important that we explore many ways to make support available to as many people as possible; so long as we continue to offer care that relies on human interaction, technology can be a rich resource.

Sarah B. Pollak
San Francisco, Calif.

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MARCH 29 – APRIL 4, 2023

GOINGS ON ABOUT TOWN

It would have been enough if the comedian-activist Morgan Bassichis had merely helped us laugh at the pandemic (with their "quarantunes," on Instagram, and a book of wry to-do lists); it would have been enough if Bassichis had only created sparkling, progressive standup, spoofing—and offering—self-care. But they're now serving us **"A Crowded Field"** (at Abrons Arts Center, March 31-April 8), both a tribute to and a critique of Passover narratives, the last in a left-leaning, musico-comic trilogy about radical Jewish politics.

PHOTOGRAPH BY BEN BERKES

As ever, it's advisable to check in advance to confirm engagements.

MUSIC

"American Songbook"

POP To initiate this year's "American Songbook" series, Lincoln Center delves into canonical works of the Irving Berlin era, by way of a rascal from the rock era—Harry Nilsson, who, in 1973, took a break from carving his own pop jewels to issue a standards album, "A Little Touch of Schmilsson in the Night." At David Geffen Hall, husky-voiced Nathaniel Rateliff sings through that bittersweet concept record, plus some Nilsson compositions, with an orchestra at his back. Subsequent concerts in the series rotate around a clever theme, with each performance taking inspiration from a different bygone Manhattan music club. At the Appel Room, the pianist Matt Ray anchors a toast to Café Society, where Billie Holiday first sang "Strange Fruit" (April 5-7), and the David Rubinstein Atrium hosts parties honoring the downtown dance temple Paradise Garage (April 14), Harlem's storied Savoy Ballroom (April 20), and, in a danceable finale on April 21, the Palladium Ballroom, the cradle of mambo.—*Jay Ruttenberg (David Geffen Hall; April 1.)*

Eric Comstock

CABARET As the late Bobby Short made apparent, a little jazz—with its insistence on spontaneity and invigorating swing—can give cabaret a needed kick in the pants. Eric Comstock stirs up action from behind the piano in a regular spot at this midtown venue; he's joined by his wife, cohort in repartee, and fellow-singer Barbara Fasano, plus the redoubtable bassist Sean Smith. No surprise considering his time in the cabaret trenches, Comstock speaks the language of standards fluently; Porter, Rodgers and Hart, and their ilk are like family, but Bob Dylan, Carole King, and Todd Rundgren have been known to slip into the mix. An April Fools' Day performance promises additional mirth.—*Steve Futterman (Birdland; April 1.)*

Stéphane Degout

CLASSICAL A baritone of suppleness and intensity, Stéphane Degout opens Park Avenue Armory's tenth annual recital series, with the pianist Cédric Tiberghien, in the venue's elegantly intimate Board of Officers Room. The duo's program suggests a dark and equivocal dream, with Berg's Four Songs, Debussy's "Le Promenoir des Deux Amants," and Schubert lieder, such as "Nacht und Träume." Later in the spring, the transfixing tenor Allan Clayton makes his North American recital début, alongside the pianist James Baillieu, with songs by Schumann, Purcell, Britten, and Nico Muhly (April 27 and April 29). The pianist Pavel Kolesnikov plays two programs—Bach's imposing Goldberg Variations (May 22) and a collection of pieces evoking night and starry skies, including Chopin nocturnes and Thomas Adès's "Darkness Visible" (May 24).—*Oussama Zahr (Park Avenue Armory; April 3 and April 5.)*

Dorothy Moskowitz & the United States of Alchemy: "Under an Endless Sky"

EXPERIMENTAL The United States of America, an outré psychedelic band that paired the electronic adventures of Joseph Byrd with Dorothy Moskowitz's lonely croon, released a self-titled album in 1968, then immediately disintegrated. Although it proved too far out for its far-out milieu, the LP endured as a pet favorite of bent souls. (When the retro-futurist indie band Broadcast took flight, this was the album most on its members' lips.) Moskowitz is now in her eighties, with an eye-popping C.V. extending to Country Joe's All-Star Band, Indian raga music, and "Sesame Street." For her first album since 1968, Moskowitz teams up with the composer Francesco Paolo Paladino and the lyricist Luca Chino Ferrari—Italians billed as the United States of Alchemy—in a return to the avant-garde essence, if not quite the sound, of her sixties band. With textures that hint at ambient music, it's a less frenzied work. But the aura of surrealism remains, steered by a vocalist who, young or old, serenades the land of dreams.—*J.R. (Streaming on select platforms.)*

Terrace Martin

JAZZ Jay Leno bought a young Terrace Martin his first professional horn. The savant has since become a multi-instrumentalist, inheriting the coöperative spirit of his father, the veteran jazz drummer Curly Martin. Alongside his cousins, the acclaimed bassist Thundercat and the drummer Ronald Bruner, Jr., the younger Martin has been integral to L.A.'s cross-pollinating jazz and hip-hop scenes, working closely with Kendrick Lamar on "To Pimp a Butterfly," the rapper's hybrid opus. Martin's group Dinner Party, which includes the like-minded Kamasi Washington, Robert Glasper, and 9th Wonder, is as semi-formal as its name implies, matching the stateliness of jazz with rap swagger. Even his solo albums, which pull from G-funk, synth-led R. & B., and eighties soul, are highly collaborative works—so, too, is this residency, which is co-billed with some musical friends.—*Sheldon Pearce (Blue Note; March 28-April 2.)*

DANCE

Atamira Dance Company

Founded in New Zealand, in 2000, this troupe embodies Maori culture through contemporary dance. The title of its New York début, "Te Wheke," refers to a giant octopus in Maori mythology, and the work uses a tentacular structure as a metaphorical model of the concept of *hauora* (well-being). The piece was created by eight choreographer-dancer teams. Sheets of black silk, knotted rope, and video projections combine with undulant and aggressive motion to suggest the ocean and the shape-shifting creatures within it.—*Brian Seibert (Joyce Theatre; March 29-April 2.)*

Beth Gill

Usually spare, formal, and slow-moving, Beth Gill's works can cast a mystifying spell, revealing a dream logic in the precise arrangement of mundane materials. In recent years, her dances have grown darker, more overtly dramatic, psychological, and surreal. Her new piece, "Nail Biter," débuting at Bard College, digs further into

R. & B.

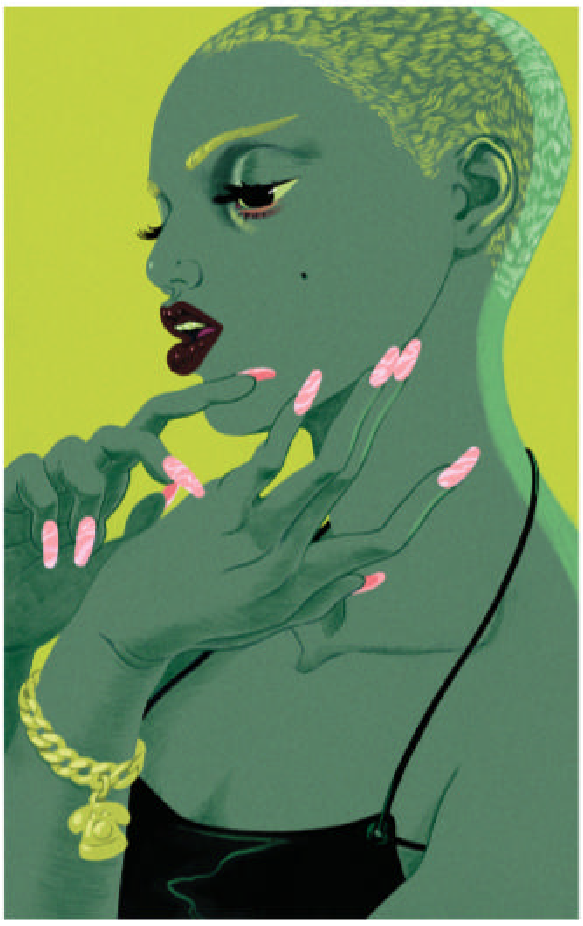


ILLUSTRATION BY EERO LAMPINEN

The kaleidoscopic R. & B. of Olivia Williams, the young, Dallas-born singer who performs as **Liv.e**, reflects the fun-house feeling of tortuous love. The wild, capacious sound of her sophomore LP, "Girl in the Half Pearl," offers lessons in self-possession, journeying from a drum-'n'-bass echo of "A Love Supreme" (unintentional, Williams says) to biting lyrics, blown-out screams, and singularly psychedelic soul. Written, and often produced, by Liv.e, the music demonstrates why this ascendant experimentalist has been endorsed by her kindred spirit Erykah Badu and by the rapper Earl Sweatshirt, with whom Liv.e has collaborated. At Baby's All Right, on April 3, Liv.e layers, loops, and pitch shifts her way toward an astral aesthetic that she has called "home."—*Jenn Pelly*

PODCAST DEPT.

ILLUSTRATION BY ELENI KALORKOTI

When the journalist and author Jo Piazza started the podcast "Committed," in which she interviewed married couples about staying together against all odds, she was focussed on understanding how two people could make monogamy work despite its increasing unfashionableness within certain circles, as polyamory and other reimaginings of cloistered coupledom have become more mainstream. After ending that series last August, Piazza realized that there was another story emerging: women, she found, are having extramarital affairs in record numbers. In her new show, **"She Wants More"** (out now, from iHeart), she explores this phenomenon, talking to several women who have pursued romantic relationships outside their marriages or primary partnerships. Much like "Three Women," Lisa Taddeo's best-selling book, from 2019, about experiments in adultery (a television adaptation comes soon to Starz), "She Wants More" approaches its subjects not with judgment or condemnation but with fascination, and an eager eye for juicy details. Piazza seems genuinely curious about the forces that compel women to stray, and she encourages her guests to speak freely about both the complications and the elation that come with stepping out. The show is addictive and absorbing—current-affairs reportage at its finest.—*Rachel Syme*

myth, psychodrama, and horror, attempting to access the collective unconscious. Her usual collaborators—the composer Jon Moniaci and the costume designer Baille Younkman—join her, along with four other excellent dancers.—*B.S. (Fisher Center at Bard, Annandale-on-Hudson, N.Y.; March 31-April 2.)*

Miami City Ballet

The choreographer George Balanchine created the ballet "Square Dance" in 1957, combining the manners and joy of American folk dancing with the luminosity and rhythms of Baroque music, itself based on European dance forms, such as the gigue and the saraband. Balanchine's original version included a square-dance caller, dropped in later stagings. But Miami City Ballet, a company steeped in the Balanchine style, has reinstated the concept, adapting it for a Miamian context (the new text is bilingual). At "Works & Process," a small contingent of dancers, including Stanislav Olshanskyi—the company's new, Ukrainian principal male dancer—performs excerpts.—*Marina Harss (Guggenheim Museum; April 2-3.)*

National Ballet of Canada

For its first visit since 2016, Canada's largest ballet company has selected a trio of works, two of them recent and one a modernist classic by the British choreographer Kenneth MacMillan (of "Romeo and Juliet" fame). MacMillan's "Concerto" (1966) is set to Shostakovich's Second Piano Concerto, music better known in New York for its use by Alexei Ratmansky in "Concerto DSCH," for New York City Ballet. Crystal Pite, a master of mass movement, contributes "Angels' Atlas," from 2022, a tone poem in roiling bodies and chalky light. In "Anima Animus" (2018), David Dawson considers the Jungian concepts of the feminine and masculine unconscious, in search of a genderless dance language.—*M.H. (New York City Center; March 30-April 1.)*

Noche Flamenca

This beloved flamenco company and its volcanic star, Soledad Barrio, return to Joe's Pub—an intimate venue suited to the troupe's stripped-down, nothing-but-the-essentials aesthetic. The fine musicianship and the passionate dancing don't require much space, and drinks help with the festive mood. The program, "Amanecer" ("Dawn"), combines a few company classics with new works that showcase younger members.—*B.S. (Joe's Pub; March 28-April 2.)*

THE THEATRE

Crumbs from the Table of Joy

Mourning is its own plot: shock then anger, disorientation, and tears; distorting changes that can never be set aright. This play by Lynn Nottage, from 1995—revived by Keen Company, under Colette Robert's direction—takes place in the nineteen-fifties, amid the stunned aftermath of a death. Ernestine (Shanel Bailey) and Ermina (Malika Samuel) are teen-age girls, almost women, whose mother has died. Their father, Godfrey (Jason Bowen), uses religion as a route around pain: he's become a devotee of the preacher Father Divine and has followed him north, from Pensacola, Florida, to the urban wilderness of Nostrand Avenue, in Brooklyn. Ernestine, the older sister, introverted and smart, moves the action forward through monologues, chronicling the sudden arrival of an aunt, Lily (Sharina Martin), and of a German woman named Gerte (Natalia Payne). The ensemble acts with a keening simplicity: beneath each sweet performance runs a lasting ache.—*Vinson Cunningham (Theatre Row; through April 1.)*

How to Defend Yourself

Liliana Padilla's new play is more like three different plays that don't always coexist well together. The first is a furious rape-culture drama, in which sorority sisters (Talia Ryder and Sarah Marie Rodriguez) run a coed self-defense course, prompted by a brutal assault on a friend at a frat party. The second is a college-speak comedy: the leaders of the class are overconfident—"We're basically therapists," one says, inaccurately—and there's a certain amount of humor in allyship pabulum. Third, there's the drama of ideas, about sexual communication and the ease with which people—even longtime friends, such as those played by Gabriela Ortega and Ariana Mahallati—can misread signals. Padilla is extraordinarily daring, but the plot deforms under the weight of such a multipronged approach (as when the self-defense workshop turns, bizarrely, into a class on erotic intimacy). Performances vary: there's strong, funny work from Sebastian Delascasas, as a flummoxed frat bro, and from the show's innocent, Mahallati. But the play's three directors—Padilla, Rachel Chavkin, and Steph Paul—all pull in different directions, and that leaves the most important scenes, those with genuinely scarifying ideas, falling on unprepared shoulders.—*Helen Shaw (New York Theatre Workshop; through April 2.)*

ART

Tina Barney

The photographs in this exhibition were made between 1976 and 1981, when Barney was in her early thirties, married, with two sons, and shuttling between the East Coast and her family in Sun Valley, Idaho. Their settings include a marina, a golf course, private pools, broad summer lawns, Rodeo Drive, and Fifth Avenue. But, despite the privileged environs, the over-all mood is anxious and vaguely uncomfortable, as if the photographer were searching not just for her best vantage point but for her place in a world that she was born into. (A descendant of one of the Lehman brothers, Barney grew up on the Upper East Side, where she was embarrassed to be driven to school by a chauffeur.) Only when the photographer realized that she could get closer to the truth by staging it—by subtly combining fact and fiction—did her pictures really come together. Barney has described her early images as "loose sketches a painter might use to plan for a larger painting," but she is too exacting to be casual, and her attempts at vernacular naturalism can feel stiff or self-conscious. Her shot of a line of unhappy-looking bathers at a fogged-in water park, from 1979, could have been taken by a drone.—*Vince Aletti (Kasmin; through April 22.)*

Minerva Cuevas

For more than two decades, this incisive Mexican Conceptualist has been critiquing the devastating effects of extractive capitalism, often through the pointed appropriation of brand identities. The centerpiece of her new show, "in gods we trust," is a pristine white wall-spanning relief, a monumental mélange of pre-Columbian imagery, including depictions of the Aztec water goddess Chalchiuhtlicue and the logos of multinational corporations, which, in the artist's clever design, are almost indistinguishable from one another. After all, corporate insignias are often based on mythical creatures and deities, whether it's ExxonMobil's Pegasus or British Petroleum's concentric sunburst, representing the Greek sun god Helios. Cuevas conceived her piece specifically for New York City, and she sneaks a turtle into her composition, in solidarity with Diego Rivera, who also depicted one in his mural commission for the Rockefeller Center, which was destroyed, in 1934, because the artist refused to remove its communist themes.—*Johanna Fateman (Kurimanzutto; through April 15.)*

Senga Nengudi

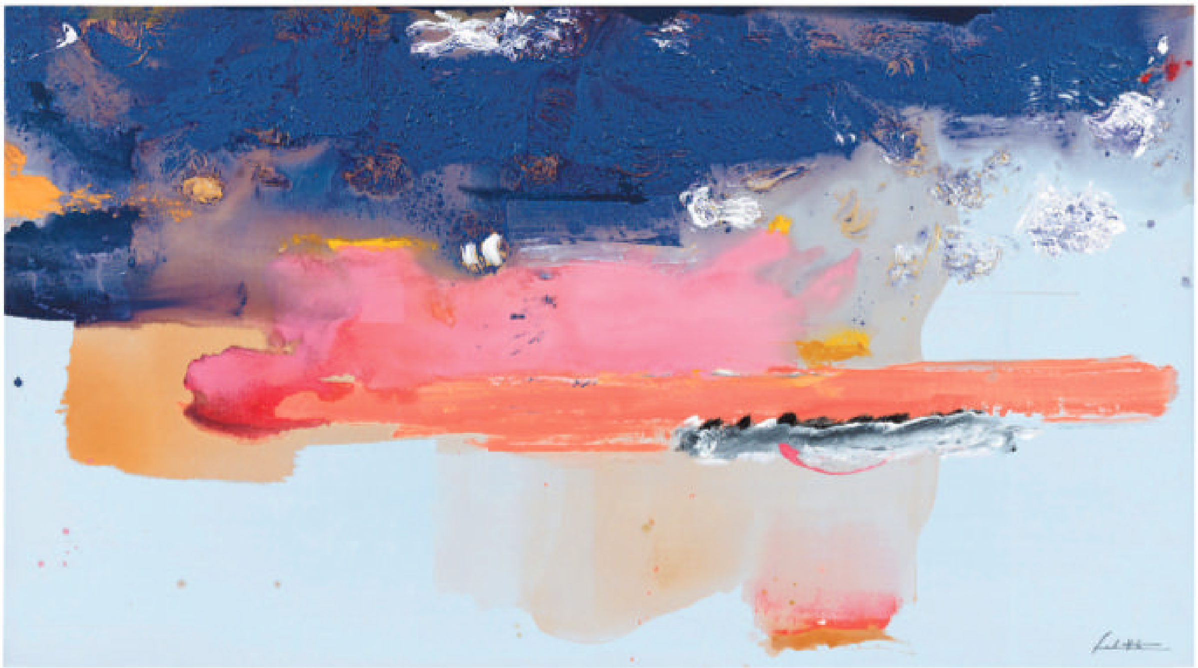
Though this delicate and memorable exhibition isn't a retrospective, it does convey Nengudi's now fifty-year-old philosophical belief in flow. From the beginning of her career, this Black American artist (who has lived in Colorado since 1989) established her own poetics of the body and how it moves through the world, a poetics that is unimpeded by racial distinctions; Nengudi takes from the cultures that have influenced her and recasts them all in her own image. For example, in 1966 she travelled to Japan, attracted by the experimentation and the "happenings" of the Gutai Art Association, fellow-artists who were breaking the frame to make work that was physically free, unbounded. Her show is itself a kind of happening across five galleries, drawing on the tension between freedom and resistance, collapse and resurrection. The first thing you see is "Wet Night—Early Dawn—Scat Chant—Pilgrim's Song" (1996), a multimedia work that includes a selection of spray-can paintings on cardboard, covered in bubble wrap and dry-cleaning bags. In the corners of the room, Nengudi has sprinkled earth-toned pigment, mixed with what looks like glitter, rivulets of color that likely shift and spread with foot traffic. On one wall, she has drawn a red body—it's the only figurative representation in the show—that appears to be flying in a circle. When Toni Morrison wrote "Song of Solomon" (1977), she was, in part, inspired by stories she'd heard of enslaved people flying back to Africa. The flight of Nengudi's figure feels like a form of release—of energy whirling and then landing somewhere. In our dreams, perhaps.—*Hilton Als (Dia Beacon; ongoing.)*

MOVIES

Pinball: The Man Who Saved the Game

The odd fact that pinball was long illegal in New York City—and that one person's

AT THE GALLERIES



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With sweeping abstract vistas that recall the roar of waterfalls and crashing waves, as well as silent deserts, the canvases of **Helen Frankenthaler,** a titan of postwar American painting, seem even bigger than they are. The twelve works on view in "Drawing Within Nature: Paintings from the 1990s," at Gagosian through April 15, were created some forty years after the artist's consequential innovation: the soak-stain technique, which bridged Abstract Expressionism and color-field painting. The show proves that Frankenthaler, who died in 2011, at the age of eighty-three, was still at the height of her powers in her sixties—a mercurial colorist moving between pours and the palette knife, translucent washes and clotted impasto. The oceanic drama of the eight-foot-wide "Poseidon," from 1990, is achieved with layered pools of thinned-out acrylic color in aqua and fog. A flat brush loaded with orange has been dragged across the surface, leaving a fiery trail. A similar line appears in the panoramic "Western Roadmap" (pictured above), from 1991, but it reads more like a dusky horizon, with purplish storm clouds looming over a near-empty expanse. By contrast, in two other pieces from 1991, the fantastic "Reef" and "Spellbound," wild atmospherics emerge from black backgrounds.—*Johanna Fateman* presentation to the City Council, in 1976, caused the law to be changed—gives rise to this invigorating, idiosyncratic, and audacious low-budget historical drama, written and directed by the Bragg brothers, Austin and Meredith. It's the surprising story of a young man named Roger Sharpe (Mike Faist), a collegiate pinball wizard and an aspiring writer who, in the mid-seventies, moves to New York and gets a job at *GQ*. Learning that the game is banned, he writes a piece about it, which he expands into a book; then, inspired by his interviews with the industry's charmingly crusty characters, he shifts his focus to advocacy. The movie is punctuated by the elder Sharpe telling his own story on camera—though he's actually played by Dennis Boutsikaris, and the character turns up alongside his younger self during the dramatic action. This intricate yet breezy film is a feast of wryly nuanced acting, a giddy wonder, and also a warmhearted, sharp-edged love story: young Roger's encounter with Ellen Steinberg (Crystal Reed), an artist working as a secretary, is a romantic joust worthy of classic-age Hollywood.—*Richard Brody (In theatrical release and streaming on Prime Video, Vudu, and other services.)*

The Talented Mr. Ripley

In this 1999 film, the writer and director Anthony Minghella, whose previous movie was "The English Patient," returns to the roasted light of Italy; this is a less passionate project—or, rather, the passions are directed toward less salubrious ends. The source is Patricia Highsmith's spooky, misanthropic novel of 1955; Matt Damon plays Tom Ripley, her murderous hero, although he probably lacks the quicksilver elusiveness that the role demands. He is outshone by Jude Law, whose violent disappearance, halfway through the picture, is a grievous wound. Law is sunny, slippery, and pansexual; he might have made a better Ripley himself. In the female roles, Gwyneth Paltrow struggles to find anything much in the stony Marge, whom Highsmith so loftily scorned; more rewarding is the dreamy Cate Blanchett as an heiress named Meredith Logue—a part invented by Minghella. Her fine features are like a flawless period detail in themselves. The film feels warm but unsettled, as if hinting at approaching storms; the score, too, flits from lugubrious to manic. With Philip Seymour Hoffman, perfectly cast once again, this time as another of Tom's victims.—*Anthony Lane (Reviewed in our issue of 12/27/99.) (Streaming on Pluto, Prime Video, and other services.)*

A Thousand and One

The suspenseful and substantial first feature by the writer and director A. V. Rockwell is a wide-ranging, finely detailed view of one family's confrontation with crises endemic to New York's Black communities. The drama starts in 1994, when a twenty-two-year-old hairdresser named Inez (Teyana Taylor) is released from Rikers Island after a year and a half of incarceration. Back in her Brooklyn neighborhood, she finds her six-year-old son, Terry (Aaron Kingsley Adetola), who's in foster care, and she kidnaps him in order to raise him herself. Inez quickly finds work and, in the course of the years (the action runs through 2005), she rents an apartment, marries her longtime boyfriend, Lucky (William Catlett), and guides Terry (played at thirteen by Aven Courtney and at seventeen by Josiah Cross) to academic success—but unresolved traumas, the lure of the street, health trouble, heavy-handed policing, and planned gentrification put appalling pressure on her household. In Taylor's breathtaking performance, Inez pursues her vision of family unity and progress with steadfast and ferocious determination; though Terry remains somewhat under-characterized, the movie is nonetheless a passionate panorama of political obstacles to personal achievement, the inseparability of private life from public power.—*R.B. (In theatrical release.)*

Tori and Lokita

The dangers and torments facing migrant children in Europe are revealed with a diagnostic fury in the new film by the Belgian directors Jean-Pierre and Luc Dardenne. Tori (Pablo Schils), a boy of eleven, escaped from Cameroon; Lokita (Joely Mbundu), a sixteen-year-old girl, left her home country of Benin. They paired up, under the guise of siblings, amid their clandestine route to Italy and then to Belgium; there, they live in a shelter and work at a pizzeria, where their main job is delivering illegal drugs to the chef-dealer's clients, and where Lokita faces sexual abuse. Although Tori quickly gets legal standing, Lokita is denied permanent residency and forced even deeper into the underground economy, as a virtual indentured servant; meanwhile, both of them are pursued, harassed, and threatened by the traffickers who got them there. The resourceful youths struggle bravely nonetheless to stay together and to improve their situation, against colossal odds. The film has the ardor and the specificity of investigative journalism; it brings to light the personal stories of people relegated to the shadows of mainstream society—and the bureaucratic decisions, made with an inhuman indifference, that result in their misery.—*R.B. (In theatrical release.)*

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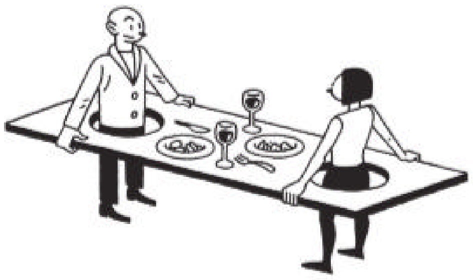
ON THE BIG SCREEN

COURTESY FILM AT LINCOLN CENTER

Good films unfold their virtues in the course of a viewing, but greatness is usually revealed in a movie's first images, as it is in **"Civic,"** a short film directed by Dwayne LeBlanc, screening in this year's New Directors/New Films festival (which runs March 29-April 9 at MOMA and at Film at Lincoln Center). "Civic" begins with a nighttime view of city lights—daringly out of focus—seen through the windshield of a moving car, placing the action in an inner space of subjectivity that the movie sustains and deepens in its nineteen minutes. The title suggests both the film's setting—the interior of a car—and the public life that emerges from its confines. A young man named Booker (Barrington Darius) returns to his neighborhood, South Central Los Angeles, after a long absence and, in a few days and nights, reconnects with friends yet discovers his distance from the community at large. The script, by LeBlanc and Nicole Otero, sketches vast emotional surges in brief encounters, and LeBlanc's direction—yielding a surprising succession of sharply composed shots, a poignant overlay of voices, and poised performances—blends freedom and precision in a style entirely his own.—*Richard Brody*



TABLES FOR TWO

HAGS

163 First Ave.

The movie "The Menu," last year's sendup of such rarefied restaurants as René Redzepi's Noma, carries the premise of fine dining to its logical conclusion: if you take it too seriously—spoiler alert—it will literally kill you. Recently, the Zeitgeist has seemed to grow wise to the absurdities inherent in the cult of the celebrity chef, and to question why restaurant workers should suffer for the job.

HAGS, which opened last summer in the East Village, is an experiment in queering fine dining, and not subtly: the restaurant's tagline is "by Queer people for all people." The owners are a queer couple—Camille Lindsley, the sommelier, and Telly Justice, the executive chef, restaurant veterans who worked, respectively, at Aldo Sohm Wine Bar and at Wildair and Contra. The majority of their staff identify as queer. Every table in the tiny, high-design dining room is set with a bowl of pins printed with pronouns; the bathroom features a funhouse mirror meant to protect trans diners from feeling dysphoric, and an apothecary jar filled with fentanyl test strips.

Determining whether the experiment succeeds is, of course, a matter of perspective, mine being that of a cis hetero white woman. I imagine, and I hope, that Justice, a trans woman, who has said that she's never felt completely comfortable in a restaurant kitchen, has created a working environment that corrects for that. The front-of-house staff, led by Lindsley, is emphatically warm and welcoming.

The possibilities for exploring queerness through food are rich. One of the unifying principles of MeMe's, a now closed queer diner in Crown Heights, was camp, which resulted in some incredibly creative and wonderful comfort food. At HAGS, the menu, offered as a three- or five-course tasting, leans cerebral. My meal there last September began with a delicious Homo Hand Salad: a painstaking arrangement of crunchy, salted leaves of crimson endive, to be dipped in a creamy, pale-pink breakfast-radish vinaigrette seasoned with pickled quince, rose water, lime zest, hibiscus, and umeboshi.

I was similarly impressed by a ripe, sweet end-of-season beefsteak tomato, blanketed in a glossy green fava emulsion, drizzled in sesame oil, and topped with gooseberries, perilla and shiso leaves, and sesame seeds. The salad and the tomato dish both happened to be vegan. Inasmuch as you can define queer cuisine, veganism plays a role, at least in part as a rejection of the status quo. A queer friend of mine put it more bluntly: "Queer people are obsessed with zoodles."

Indeed, there were zoodles (spiralized zucchini) on HAGS's September menu, though they were made from avocado squash and were not vegan, topped with lump crab and Urfa-chili-marinated stracciatella cheese. That composition worked beautifully. I can't say the same about a dish I tried more recently, which somehow managed to convey the limits of veganism while incorporating both meat and dairy—roasted Hasselback rutabaga, topped with a confusing mix of beer cheese, collard chips, house-made Worcestershire sauce, pancetta, and dates.

There were also plenty of fine-dining tropes, such as a "carrot Pringles" amuse-bouche, tortured to the point of parody: caramelized carrot juice was mixed with carrot tea and pulverized Carolina rice, for a dough that was dehydrated, deep-fried, dusted with caramelized carrot powder, and finished with pearls of carrot-tofu crema. (Should you prefer to make this yourself, all HAGS recipes are available online, as part of the restaurant's stand against gatekeeping.) The most radical meal I had at HAGS was on a Sunday, the night they offer a special "pay what you can" menu, "on a sliding scale, which includes free." Subs—meatballs, Sunday gravy, and mozzarella on one, soft tofu, oregano vegan mayo, and fennel salad on the other—were served in cardboard boxes. Ice-cream sandwiches were made with vegan chocolate-chip cookies and beet ice cream. Glasses of wine from an array of open bottles on the bar were a flat nineteen dollars. The vibe was relaxed and convivial. It wasn't fancy, but it was more than fine. *(Tasting menu $85-$145.)*

—Hannah Goldfield

PHOTOGRAPH BY JUSTIN J. WEE FOR THE NEW YORKER; ILLUSTRATION BY JOOST SWARTE

Ian Falconer

1959-2023

Thank you for showing us how to
DREAM BIG!

Olivia illustration © by Ian Falconer, 2000

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THE
NEW YORKER

THE TALK OF THE TOWN

COMMENT
OFFENSES

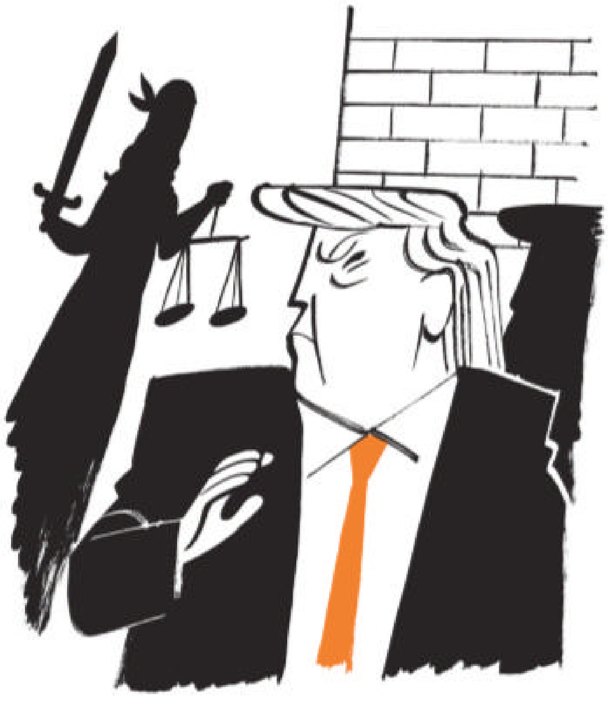
Sometimes a fire drill can reveal useful information about how people might react in the event of a real emergency. At around 7:30 A.M. on Saturday, March 18th, Donald Trump pulled an alarm when he told his followers on Truth Social that he expected to be arrested the following Tuesday. He was wrong—the week passed with nary a mug shot. Still, Alvin Bragg, the Manhattan District Attorney, is reportedly close to bringing an indictment against him, on charges related to a payment, in 2016, of a hundred and thirty thousand dollars to Stephanie Clifford, the adult-film actor known as Stormy Daniels. And Trump's post did set off a scramble.

Just after 11 A.M. that Saturday, Kevin McCarthy, the Speaker of the House, denounced the anticipated indictment on both Twitter and Truth Social, calling it an "outrageous abuse of power." He said that he was "directing relevant committees" to investigate whether Bragg might be using federal funds to "subvert our democracy." At around 1 P.M., the chair of the House Judiciary Committee, Jim Jordan, posted, "God Bless President Trump. Real America knows this is all a sham." On Monday, Jordan and the Republican chairs of two other committees—James Comer, of Oversight, and Bryan Steil, of House Administration—sent a letter to Bragg requesting his testimony and all "documents and communications" on the matter. Bragg's office pushed back, and by the end of the week there was talk of subpoenas.

ILLUSTRATIONS BY JOÃO FAZENDA

At that point, nobody outside of Bragg's office and the room in which a grand jury has been hearing the Daniels case since January knew for sure what the exact charges against Trump might be, or whether an indictment would ever come. Trump's defenders were thus operating on political autopilot. Their task was made easier by the somewhat marginal nature of this particular case, at least in comparison with others being built against Trump.

In Georgia, Fani Willis, the district attorney for Fulton County, may soon decide whether to bring charges in her investigation of alleged attempts to steal the state's electoral votes in the 2020 election. The evidence includes the notorious recording of Trump telling the Georgia secretary of state to "find" him enough votes to overtake Joe Biden. In Washington, D.C., Jack Smith, a special counsel, won a legal fight to compel the testimony, last week, of one of Trump's lawyers as part of his investigation into the former President's handling of a stash of official documents, many of them marked classified, at his Mar-a-Lago home. (The ruling relied on the "crime-fraud exception" to the attorney-client privilege.) Smith is also investigating Trump's role in the events leading up to the assault on the Capitol on January 6, 2021.



And so before long Trump may have to appear in multiple venues to defend himself regarding serious crimes that do relate to the subversion of our democracy. Then there's the Daniels case. Daniels says that she had consensual sex with Trump once, in 2006; a week and a half before the 2016 election, she signed a nondisclosure agreement negotiated by Michael Cohen, then a Trump lawyer. He wired her the hundred and thirty thousand dollars, using money he raised with a home-equity line of credit. Cohen has said that Trump told him to pay her and then reimbursed him, pointing to a series of checks signed by Trump, Donald Trump, Jr., and a Trump Organization executive. Trump has said that Daniels and Cohen are liars, and that he's the victim.

As squalid as the whole episode is, paying money for the silence of a former sexual partner is not necessarily a crime. But the checks were allegedly recorded as being for "legal expenses," according to prosecutors in a separate case against Cohen, and New York has a law against falsifying business records. That offense is only a misdemeanor, however; to make it a felony, the falsification has to have been done to help commit or conceal another crime. Reportedly, Bragg is looking at a campaign-finance offense. It's not the simplest case, though, and there's a potential problem with combining a state business charge with a federal election charge, and with relying on testimony from Cohen, who has previously pleaded guilty to financial crimes and to lying to Congress.

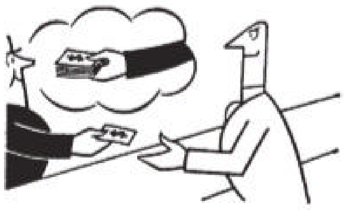
Last year, Bragg declined to pursue charges in a case related to Trump's businesses, a decision that, at the time, prompted criticism from some Democrats and the resignation of two members of the D.A.'s team, one of whom wrote a book disparaging him. Republicans have seized on that dynamic. Nikki Haley, who, like Trump, is running for President, speculated that Bragg wants to get "political points." Others have decided that Bragg's going after Trump is actually an illustration of how Democrats are soft on crime. Former Vice-President Mike Pence, for example, said he was "taken aback" that Trump might be indicted "at a time when there's a crime wave in New York City"—though it's unclear what one has to do with the other. Pence was in Iowa when he made those remarks; he, too, is a possible challenger to Trump. He is also fighting a subpoena in Smith's January 6th inquiry.

But Trump has a way of drawing people who express carefully hedged, more or less rational defenses on his behalf into the vortex of his irrational, indefensible rants. Governor Ron DeSantis, of Florida, another potential G.O.P. contender, seems to have hoped for an opportunity to differentiate himself from Trump, with remarks that deplored the possible indictment while emphasizing the terms "hush money" and "porn star." ("Ron DeSanctimonious," Trump replied.) DeSantis called Bragg a "Soros-funded prosecutor"—only to see Trump then call the D.A., in a Truth Social post, a "SOROS BACKED ANIMAL." (George Soros gave money to a group that, in turn, supported Bragg.) Trump also accused Bragg of "doing the work of Anarchists and the Devil" and being a "degenerate psychopath." He said that an indictment could bring "death & destruction."

The Daniels imbroglio, in short, may give Republicans a deceptive view of how easy it will be for them to navigate Trump's burgeoning legal troubles—to appear just loyal enough to not alienate his supporters without getting in too deep, while also scoring political points of their own. But the main defenses here—that the charges are slight, that personal behavior is being criminalized, that New York is a mess—won't work as well for Trump or his apologists in Georgia or in Washington. One indictment won't stop others.

—*Amy Davidson Sorkin*

"YOU DON'T SAY" DEPT.
HUSH MONEY: A HISTORY



Is it a stretch to submit that Donald Trump faces a looming indictment for mishandling a payoff to the porn star Stormy Daniels and not, say, for inciting an insurrection, because the Daniels case has an obvious tagline? Pick any news outlet—*Times*, Fox, Breitbart. It's always the "hush-money case." Here's a concept you can sell. Epsteins, Weinsteins, Charlie Sheens. It's easily comprehensible, onomatopoeic. *Hush.* The term is sultry, lubricious; typically what's being hushed is evidence of sex. Unlike the confidential legal settlement or the corporate N.D.A., hush money carries a whiff of the entrepreneurial. When Joseph Addison and Richard Steele started *The Tatler*, in 1709, they courted it. "I expect hush-money to be regularly sent for every folly or vice any one commits in this whole town," Steele wrote. He was the first to employ the term but not the practice; for about as long as people have been saying stuff, others have been paying them not to. In Genesis, the King of Gerar tries to seduce Abraham's wife, then pays him off with sheep, oxen, and servants. The King calls it "a covering of the eyes." See nothing, say nothing.

What's the going rate these days for silence? Inflation doesn't compute precisely for sheep and oxen. Michael Jackson paid two hundred million. Bill Cosby paid three and a half, Bill O'Reilly forty-five. The sum depends on what you're trying to hush up. When Bette Davis's husband recorded her in bed with Howard Hughes, she paid him seventy-five thousand dollars to keep it private. Jerry Falwell, Jr., provided the pool boy, whom Falwell liked to watch in bed with his own wife, with around two million. (Michael Cohen, Trump's fixer, helped broker a deal.) Rudy Giuliani, in his capacity as Trump's lawyer, once offered a mathematical model. "I never thought a hundred thirty thousand was a real payment," he said, of the sum Trump paid to Daniels. "It's a nuisance payment. When I settle it as real or a real possibility, it's a couple million dollars."

"That's a preposterous statement," the victims'-rights lawyer Gloria Allred said last week, when solicited for an expert opinion. "It's not like buying a car." A few years ago, Allred was criticized in the *Times* for negotiating a confidentiality settlement between a client and Harvey Weinstein. In response, she noted that the settlement didn't preclude criminal charges; it was just a modicum of justice. She thought "hush money" conveyed the wrong message. "It's a negative term," she said. (William Safire called it "always strongly pejorative.") "There's nothing inherently wrong, and there's a lot that's right, when two people want to settle a matter."

Through the ages, hush money has nevertheless been associated with dirty dealing. Thucydides hinted at it disapprovingly, Dickens scorned the payee more than the payer, Dostoyevsky viewed it as a transaction on the road to Hell. Sweeney Todd was hit up for hush money by his tonsorial rival; he slit the guy's throat instead.

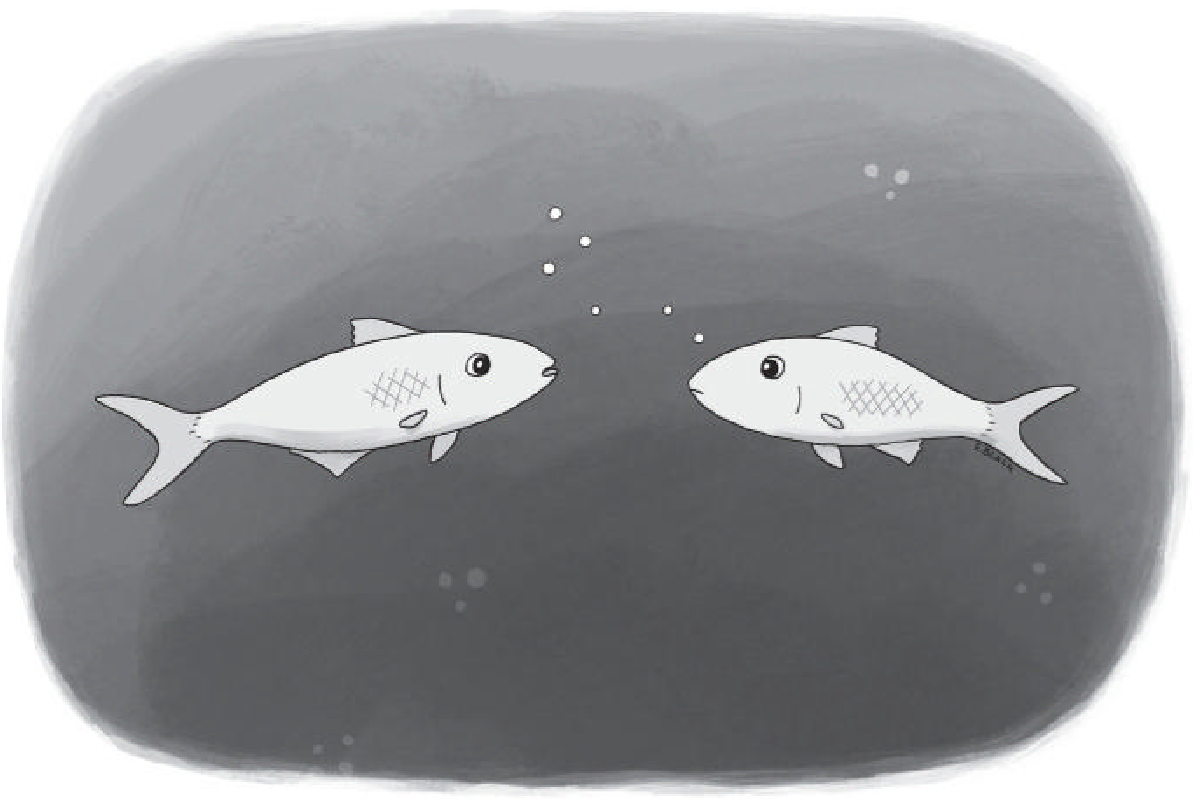
In the real world, the power dynamics are often lopsided. An alarming number of silencers are Presidents and their ilk: Hamilton, Jefferson, John Edwards. J.F.K. paid hush money of sorts, in the form of political capital, to J. Edgar Hoover, who'd discovered one of his affairs. Warren Harding sent hush money every year to a spurned mistress in possession of his love letters, which featured recurring characters that included Jerry the Penis. "Wish I could take you to Mount Jerry," Harding wrote in one. "Wonderful spot."

On the Watergate tapes, discussing the burglars, Nixon may have uttered the phrase "hush money" to his adviser Charles W. Colson, or maybe just something that sounded like it. ("Shush, honey"?) Decades later, Trump was recorded discussing a different mistress with Cohen. Was that Trump saying "Pay with cash"? Giuliani, never one to self-hush, argued on Fox News that Trump actually said, "*Don't* pay with cash." Giuliani explained that he had experience with surreptitious recordings: "How about four thousand hours of Mafia people on tape? I know how to listen to them, I know how to transcribe them. I've dealt with much worse tapes than this." Folly, vice. Cover thine eyes.

What's a wrongdoer to do? A call was placed to Eric Dezenhall, a crisis-management specialist who has advised such clients as the Sacklers and ExxonMobil and who has consulted on scores of secret settlements. "One of the things you hear is, It's the coverup that gets you," Dezenhall said. "That's not true! This shouldn't be taken as something I advise or support, but coverups work all the time."

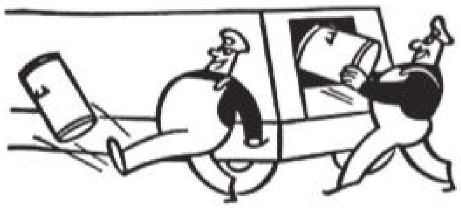
Of course, they work only if the public doesn't hear about them. "Twenty years ago, if you wrote somebody a check to stay quiet, it would stay quiet," Dezenhall said. "The problem today is people take your money, and then they go on TV anyway." Not all of them, though. Who knows what Dezenhall's clients—billionaires, celebrities—have kept hushed up? Dezenhall does, but he couldn't possibly say.

—*Zach Helfand*



"Give a man a fish and you feed him for a day—teach a man to fish and you unleash a new epoch of terror."

PARIS POSTCARD
TRASHED



Under normal circumstances, the Seine divides Paris in half. In recent weeks, however, geographical demarcations have been less pronounced than garbological ones. Alongside workers in numerous other sectors, the city's trash collectors are participating in a nationwide strike to protest an unpopular reform that will raise France's standard retirement age by two years. As of last week, nearly ten thousand tons of garbage sat uncollected on the streets—but only in half of the city. This is because waste is collected by public workers in the Second, Fifth, Sixth, Eighth, Ninth, Twelfth, Fourteenth, Sixteenth, Seventeenth, and Twentieth Arrondissements, while private companies manage the refuse of the First, Third, Fourth, Seventh, Tenth, Eleventh, Thirteenth, Fifteenth, Eighteenth, and Nineteenth. As Delphine Bürkli, the mayor of the Ninth, explained in an e-mail to her constituents, the situation "cuts the city in two." On this map of Paris, Rive Droite and Rive Gauche yield to a pair of temporary, irregular sectors. Call them Rive Sale and Rive Propre, home to the trashes and the trash-nots.

A Parisian set out to explore the reconfigured city. The trash-centric itinerary started in the Second Arrondissement, where the waste of twenty thousand residents had been piling up for sixteen days. From the borderlands of the rue de Turbigo, one could make out the spotless expanses of the Third Arrondissement. But, in the other direction, overflowing bins blocked the sidewalks, disgorging all manner of obstructive junk, so that the street resembled the playing field of a pinball machine. Superintendents and business owners were trying to maintain order, stacking Hefty bags like sandbags. One meme featured the philosopher Bernard-Henri Lévy sprawled on top of a trash mound in the same tailored suit, crisp shirt, and oddly relaxed pose in which he was recently photographed while observing combat-training exercises in northeastern Syria.

Many of the sacks had come open, revealing collective tendencies alongside orange peels, chicken bones, dirty diapers, cigarette packs, eggshells, old socks, eyeglass prescriptions, and the slipcase for a set of Taschen's "Julius Schulman: Modernism Rediscovered." Parisians, it turns out, drink a lot of Heineken. Coke, too. A lone snail shell suggested that the escargot scene may not be what it once was. In a moment not lacking for news—Emmanuel Macron's government, after pushing through the reform, had barely survived a no-confidence vote—there was not a newspaper in sight. Elsewhere, however, one pile yielded a stack of pristine birth announcements for a certain Noémie born on the sixteenth of August, 1965. On another, a discarded carton demonstrated that on this week, of all weeks, someone had bought a new garbage bin.

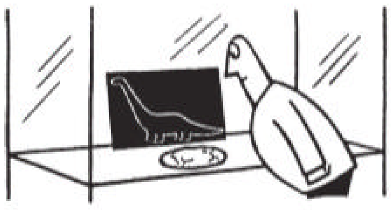
Nearby, a woman was hunched by a trash can, swiping an electronic reader over a barcode on its side. Her job, she said, was to account for the whereabouts of every trash can in the city. Not a few had been burned, with the accumulating trash serving—in a bit of general-strike symbiosis—as more kindling for the fires that protesters had been setting each night. A man driving a garbage truck worked for Derichebourg, a private firm that the prefecture had called in to start clearing the streets after the Socialist mayor of Paris, Anne Hidalgo, refused to break the strike. He had filled the truck in three hours, he said. Only about six per cent of the garbage collectors are striking—"not because they don't support the strike, but because they can't afford to," Ludovic Franceschet, a garbage collector who runs a popular TikTok account about his job, explained. He was alternating between striking and working, as his finances allowed.

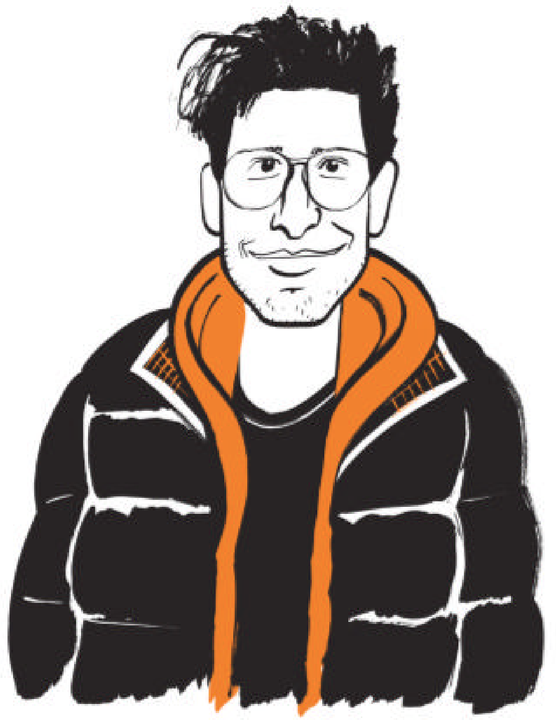
Paris's bipartite trash plan dates to 1977, when the country underwent another major strike and Jacques Chirac, the mayor at the time, said, "*Plus jamais ça*," as one of his former aides recalled to Agence France-Presse. Chirac's idea was that, whatever happened, at least half the city would remain presentable. The designation of the arrondissements was random, but, in an ironic twist, many of the trash-ridden areas traditionally lean to the political right.

In the posh Sixteenth, some residents had chipped in to fund private pickups. At Odéon, in the Sixth, one of the city's priciest arrondissements, towers of cans, bags, and boxes flanked a COVID-test tent in front of a pharmacy—a reminder, amid a political crisis that could pose health concerns, of a health catastrophe that had morphed into a political one. The pharmacist, Jean-Marc Selve, got out his phone and dialled Jean-Pierre Lecoq, the mayor of the Sixth. "It's getting disgusting," Selve said. The mayor told him to text some pictures. Selve walked outside to document the scene. "In any case, it's not Kyiv," he said.

—*Lauren Collins*

L.A. POSTCARD
PALEO





Andy Samberg

The La Brea Tar Pits, in Los Angeles, is the world's only urban Ice Age excavation site, and scientists have been working there for more than a century to extract fossils from the jammy seeps. The other day, the comedian Andy Samberg paid a visit. "Digman!," his new animated show, for adults—it's on Comedy Central after "South Park"—is set in an alternate world, where archeologists are celebrities. "Our world is more like the world we were told was the world in 'Indiana Jones,' which is that archeologists are the coolest people on the planet," he said. "I think being an archeologist *is* super cool—it's in no way saying that's not the case—it's just most of them aren't, like, running around with a whip and fighting Nazis."

Samberg, who created the series with Neil Campbell, voices Rip Digman, an adventuring "arky." Digman grew out of an impersonation of Nicolas Cage that Samberg used to do on "Saturday Night Live." He and Campbell wrote the show together. "Most of the fun of it was Googling the weirdest museums on earth and finding inspiration from that," he said. "It's like finding a phallus museum, which actually exists. I've also been made aware that there's Archeologist Twitter. So I'm hoping that we land O.K. there."

Samberg is forty-four, and married to the musician Joanna Newsom; they are the parents of a five-year-old girl, who is into country music, and a one-year-old boy. At the tar pits, he moved gingerly and wore a brace on one knee. Several months ago, he tore his A.C.L., playing soccer: a bad foot plant, on grass, while visiting his parents in Berkeley. He met Mitra Jouhari, who plays Rip Digman's assistant, Saltine, on the soccer pitch; Nick Kroll had brought her.

Samberg stopped to rest at Project 23: fourteen wooden crates containing blocks of earth packed with fossils that were discovered in 2006 when the Los Angeles County Museum of Art, next door, dug a new garage. Under a tent, there were wooden tables and old metal lamps and a string of Edison bulbs, flickering. "I feel like Laura Dern's gonna walk in," he said.

In such a place, time can seem elastic. "If aliens or if a different species becomes the dominant species on earth, would you want to know that in a hundred thousand years or whatever, they would dig up your bones and put you back together into a skeleton?" he asked. "Does that idea make you feel uneasy or excited? Or indifferent, I guess. Those are your three choices." He grinned. "For me, it's a little of each."

He ambled over to one of the crates. A fossil excavator named Karin Rice was peering over the side into a mass of compacted dirt, with bones jutting at odd angles, held together with tar. "There's a lot of bison in there," she said. "The big, slabby bones are ribs. There's giant ground sloth, there's dire wolf. Oh! There's a big scapula."

"It's like the ultimate Cracker Jack box," Samberg said. "Tastes worse."

Another employee mentioned that some of the paleontologists who specialize in worms like to use them as straws. "They'll dry out little polychaetes out in the field and then drink a soda out of the dried worms," she said. "There's some weird practices."

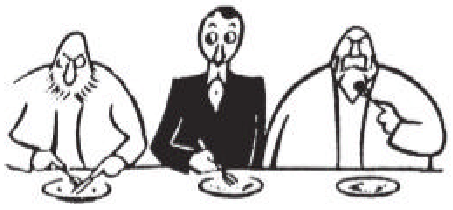
Samberg thought this might be a fruitful story line for "Digman!" "Obviously, the show's about archeologists, not paleontologists," he said. "But we've been flirting with the idea of there being a really serious rivalry."

Rice looked gratified. "Humans have been around for about this long," she said, pinching off a centimetre of air. The dinosaurs, her colleague said, are treated as a failure, but they thrived on earth for a hundred and sixty-five million years. The Ice Age, which ended approximately twelve thousand years ago, was a time of megafauna. Rice was wearing a T-shirt showing the dimensions of the short-faced bear: eleven feet six inches tall, weighing a ton. Giant ground sloths were the size of baby elephants. Some of them lived in water. “So, like, aquasloths?” Samberg asked.

Leaving the tar pits, Samberg passed a sculpture of a giant sloth, which kids were climbing on. “How many people, ’cause this is in L.A., have brought their kids here, seen these, and then pitched a giant-sloths horror movie?” he said. “ ’Cause it’s the first thing I think of—‘Ah-h-h! The giant sloths are coming!’ But then they’re all super slow. So it’s, like, ‘They’re still coming. . . .’ ” He looked at his bum leg. Tar oozed through the grass in various spots. “Everyone has to get their foot stuck in something in every scene,” he said.

—*Dana Goodyear*

THE BOARDS
THE BLACKERER VERSION



The cast and the writer of the Pulitzer Prize-winning play “Fat Ham” sat down for dinner recently at Melba’s, a soul-food restaurant in Harlem. After a sold-out run at the Public last year, the play, which is loosely based on “Hamlet,” and which takes place at a back-yard barbecue in the South, was soon to open on Broadway. Marcel Spears, who plays Juicy, a queer Black Hamlet equivalent, greeted Adrianna Mitchell, whose character, Opal, is a spin on Ophelia. “Now, wait a minute, you went home and got fine?” he said, appraising her green dress, gold hoops, and burnished cheekbones.

“You did, too, get outta here!” she replied, laughing.

“Girl, this is the same thing I literally wore in rehearsal,” Spears protested. (Plaid jacket, fedora, gold glasses.)

Mitchell was the last to arrive, along with Nikki Crawford, who plays Tedra, Juicy’s Gertrude-inspired mother. Crawford asked, “Are they bringing, like, a set menu?”

“Oh, we ate already,” Benja Kay Thomas—Rabby, the play’s Polonius, and Opal’s mother—deadpanned.

“Hold on!” Spears howled. “You can’t pull up and then be, like, So, where’s the food?” They were waiting for Melba Wilson, the restaurant’s proprietor, who was met with cheers when she finally swanned over in a colorful caftan.

“First time in Harlem, anybody?” she asked. The answer: a resounding no.

“We be up in here!” Spears said. Wilson wanted them to try a new special: pork ribs, which feature prominently in the play.

“It’s my recipe,” Wilson, a Harlem native whose parents were from South Carolina, said. “But I had the team make it up yesterday. I said, ‘Y’all got to season them ribs a little bit. Y’all got to marinate them a little bit more!’ ”

Appetizers arrived: cornmeal-crusted catfish and bubbly-skinned spring rolls filled with collard greens, black-eyed peas, and rice. “So, what’s the official opening day?” Wilson asked.

“April 12th!” the cast said in unison.

“Funny story about April 12th,” Mitchell said. There’s a moment in the play where Tedra asks Juicy to guess Rick James’s birthday, to decide who will go first in a game of charades. “The date that Juicy guesses is April 12th,” Spears said. “In all the drafts of the play, it’s been April 12th.”

“You’re giving me chills,” Wilson said, peering down the table at the playwright, James Ijames, who wore a shirt emblazoned with a photo of Billie Holiday.

“James manifested April 12th as the opening of this play,” Mitchell said.

“Not only did he manifest April 12th, we manifested Broadway,” Thomas added.

“We sure did,” Mitchell said. “There’s a part where we’re writing down movies, books, TV shows, for charades, and we would all write ‘Broadway début.’ It was like a little prayer, every time we did the show.”

“That’s how God works!” Wilson said. “The power of manifestation is everything.”

The actors took turns describing their characters. “I feel like Opal is the direct opposite to Ophelia,” Mitchell said, “in the sense that Ophelia feels driven by a lot of the men around her in the play, and Opal is very not that. I call her the bull in the china shop.”

Tedra, Crawford explained, is “wild and oversexualized, a loving mother but complicated,” and she marries her recently deceased husband’s brother.

“Messy,” Spears said. “*Mess-y!* ”

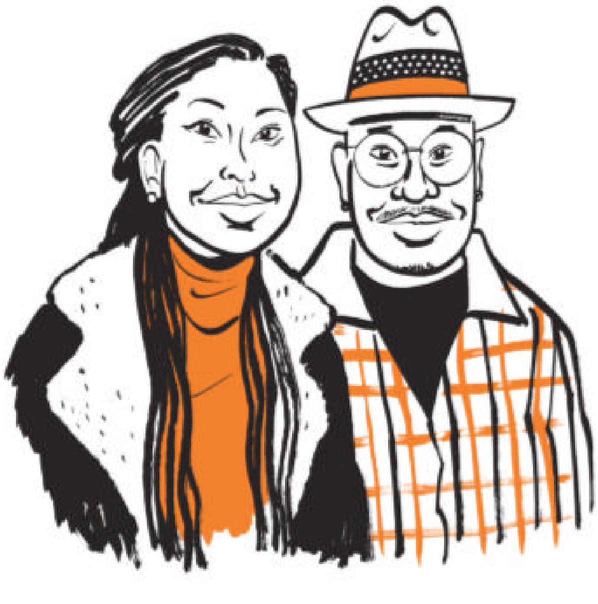
“That’s spicy, though,” Wilson said.

“That’s not even James,” Spears said. “That’s Shakespeare.”

“This is the Blackerer version,” Wilson said.

The brothers Rev and Papp, co-pitmasters of a barbecue joint, are both played by Billy Eugene Jones, who sees the roles as an examination of toxic masculinity, “experienced and enforced and passed down in this very dangerous way,” he said. “The journey is trying to see what becomes of these toxic attitudes—do they prevail or do we somehow silence them?”

Of Rabby, Thomas said, “In my mind, I’m coming to this barbecue to have some really great barbecue, but I never really get a chance to eat.” At Melba’s, the cast packed in the promised ribs, plus fried chicken, oxtail, mac and cheese, collards, and candied “A$AP” yams.



Adrianna Mitchell and Marcel Spears

“Food in the Black culture is bragging rights,” Wilson said.

“It’s power,” Spears said. “At least in my family, cooking for someone is an act of service, and an act of love. You lost somebody, you’re grieving, you broke up with somebody—they’ll be, like, Have you eaten today?”

For dessert, there was Make You Wanna Holla Carrot Cake and Grandma’s Sweet-Potato Pie. But first the group was called on to perform: another table was celebrating a birthday. “Put your hands together for the cast of the Broadway hit, opening April 12th—‘Fa-a-at Ham’!” Wilson bellowed.

“On the count of three, we’re gonna sing, Stevie Wonder style, Harlem style!” a server said. The room erupted into joyful chorus.

—*Hannah Goldfield*

AMERICAN CHRONICLES

DATA-DRIVEN

Machines have given us a powerful way of knowing things. There are others.

BY JILL LEPORE

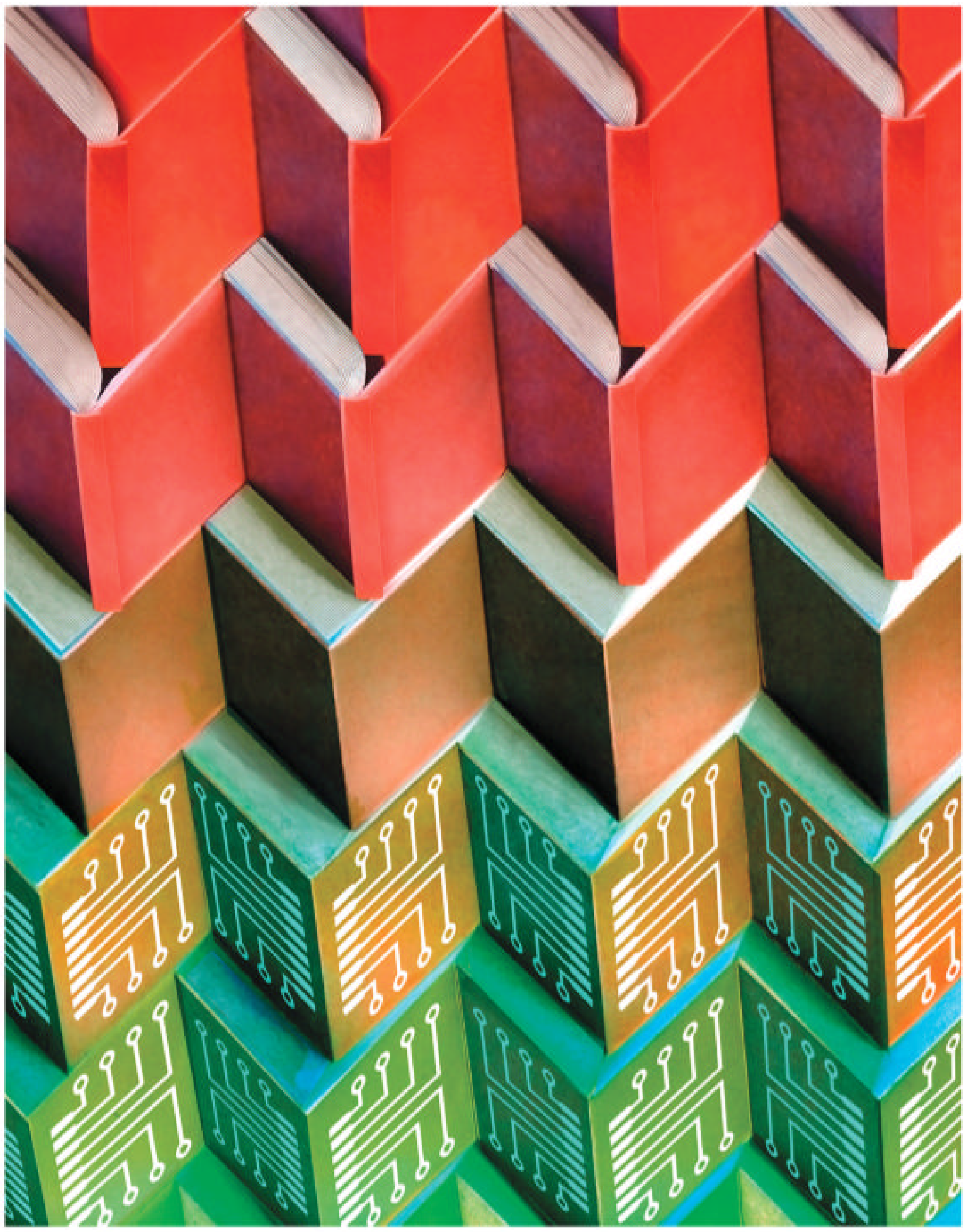


ILLUSTRATION BY KELLI ANDERSON

One unlikely day during the empty-belly years of the Great Depression, an advertisement appeared in the smeared, smashed-ant font of the New York *Times'* classifieds:

> WANTED. Five hundred college graduates, male, to perform secretarial work of a pleasing nature. Salary adequate to their position. Five-year contract.

Thousands of desperate, out-of-work bachelors of arts applied; five hundred were hired ("they were mainly plodders, good men, but not brilliant"). They went to work for a mysterious Elon Musk-like millionaire who was devising "a new plan of universal knowledge." In a remote manor in Pennsylvania, each man read three hundred books a year, after which the books were burned to heat the manor. At the end of five years, the men, having collectively read three-quarters of a million books, were each to receive fifty thousand dollars. But when, one by one, they went to an office in New York City to pick up their paychecks, they would encounter a surgeon ready to remove their brains, stick them in glass jars, and ship them to that spooky manor in Pennsylvania. There, in what had once been the library, the millionaire mad scientist had worked out a plan to wire the jars together and connect the jumble of wires to an electrical apparatus, a radio, and a typewriter. This contraption was called the Cerebral Library.

The age of data has produced dazzling illumination, surrounded by inky shadows.

"Now, suppose I want to know all there is to know about toadstools?" he said, demonstrating his invention. "I spell out the word on this little typewriter in the middle of the table," and then, abracadabra, the radio croaks out "a thousand word synopsis of the knowledge of the world on toadstools."

Happily, if I want to learn about mushrooms I don't have to decapitate five hundred recent college graduates, although, to be fair, neither did that mad millionaire, whose experiment exists only in the pages of the May, 1931, issue of the science-fiction magazine *Amazing Stories*. Instead, all I've got to do is command OpenAI's ChatGPT, "Write a thousand word synopsis of the knowledge of the world on toadstools." Abracadabra. *Toadstools, also known as mushrooms, are a diverse group of fungi that are found in many different environments around the world*, the machine begins, spitting out a brisk little essay in a tidy, pixelated computer-screen font, although I like to imagine that synopsis being rasped out of a big wooden-boxed nineteen-thirties radio in the staticky baritone of a young Orson the-Shadow-knows Welles. *While some species are edible and have been used by humans for various purposes, it is important to be cautious and properly identify any toadstools before consuming them due to the risk of poisoning*, he'd finish up. Then you'd hear a woman shrieking, the sound of someone choking and falling to the ground, and an orchestral stab. *Dah-dee-dum-dum-DUM!*

If, nearly a century ago, the cost of pouring the sum total of human knowledge into glass jars was cutting off in their prime hundreds of quite unfortunate if exceptionally well-read young men, what's the price to humanity of uploading everything anyone has ever known onto a worldwide network of tens of millions or billions of machines and training them to learn from it to produce new knowledge? This cost is much harder to calculate, as are the staggering benefits. Even measuring the size of the stored data is chancy. No one really knows how big the Internet is, but some people say it's more than a "zettabyte," which, in case this means anything to you, is a trillion gigabytes or one sextillion bytes. That is a lot of brains in jars.

Forget the zettabyten Internet for a minute. Set aside the glowering glass jars. Instead, imagine that all the world's knowledge is stored, and organized, in a single vertical Steelcase filing cabinet. Maybe it's lima-bean green. It's got four drawers. Each drawer has one of those little paper-card labels, snug in a metal frame, just above the drawer pull. The drawers are labelled, from top to bottom, "Mysteries," "Facts," "Numbers," and "Data." Mysteries are things only God knows, like what happens when you're dead. That's why they're in the top drawer, closest to Heaven. A long time ago, this drawer used to be crammed full of folders with names like "Why Stars Exist" and "When Life Begins," but a few centuries ago, during the scientific revolution, a lot of those folders were moved into the next drawer down, "Facts," which contains files about things humans can prove by way of observation, detection, and experiment. "Numbers," second from the bottom, holds censuses, polls, tallies, national averages—the measurement of anything that can be counted, ever since the rise of statistics, around the end of the eighteenth century. Near the floor, the drawer marked "Data" holds knowledge that humans can't know directly but must be extracted by a computer, or even by an artificial intelligence. It used to be empty, but it started filling up about a century ago, and now it's so jammed full it's hard to open.

From the outside, these four drawers look alike, but, inside, they follow different logics. The point of collecting mysteries is salvation; you learn about them by way of revelation; they're associated with mystification and theocracy; and the discipline people use to study them is theology. The point of collecting facts is to find the truth; you learn about them by way of discernment; they're associated with secularization and liberalism; and the disciplines you use to study them are law, the humanities, and the natural sciences. The point of collecting numbers in the form of statistics—etymologically, numbers gathered by the state—is the power of public governance; you learn about them by measurement; historically, they're associated with the rise of the administrative state; and the disciplines you use to study them are the social sciences. The point of feeding data into computers is prediction, which is accomplished by way of pattern detection. The age of data is associated with late capitalism, authoritarianism, techno-utopianism, and a discipline known as data science, which has lately been the top of the top hat, the spit shine on the buckled shoe, the whir of the whizziest Tesla.

All these ways of knowing are good ways of knowing. If you want to understand something—say, mass shootings in the United States—your best bet is to riffle through all four of these drawers. Praying for the dead is one way of wrestling with something mysterious in the human condition: the capacity for slaughter. Lawyers and historians and doctors collect the facts; public organizations like the F.B.I. and the C.D.C. run the numbers. Data-driven tech analysts propose "smart guns" that won't shoot if pointed at a child and "gun-detection algorithms" able to identify firearms-bearing people on their way to school. There's something useful in every drawer. A problem for humanity, though, is that lately people seem to want to tug open only that bottom drawer, "Data," as if it were the only place you can find any answers, as if only data tells because only data sells.

In "How Data Happened: A History from the Age of Reason to the Age of Algorithms" (Norton), the Columbia professors Chris Wiggins and Matthew L. Jones open two of these four drawers, "Numbers" and "Data." Wiggins is an applied mathematician who is also the chief data scientist at the *Times;* Jones is a historian of science and technology; and the book, which is pretty fascinating if also pretty math-y, is an adaptation of a course they began teaching in 2017, a history of data science. It begins in the late eighteenth century with the entry of the word "statistics" into the English language. The book's initial chapters, drawing on earlier work like Theodore Porter's "Trust in Numbers," Sarah Igo's "The Averaged American," and Khalil Gibran Muhammad's "The Condemnation of Blackness," cover the well-told story of the rise of numbers as an instrument of state power and the place of quantitative reasoning both in the social sciences and in the state-sponsored study of intelligence, racial difference, criminology, and eugenics.

Numbers, a century ago, wielded the kind of influence that data wields today. (Of course, numbers are data, too, but in modern parlance when people say "data" they generally mean numbers you need a machine to count and to study.) Progressive-era social scientists employed statistics to investigate social problems, especially poverty, as they debated what was causation and what was correlation. In the eighteen-nineties, the Prudential Insurance Company hired a German immigrant named Frederick Hoffman to defend the company against the charge that it had engaged in discrimination by refusing to provide insurance to Black Americans. His "Race Traits and Tendencies of the American Negro," published in 1896 by the American Economic Association, delivered that defense by arguing that the statistical analysis of mortality rates and standards of living demonstrated the inherent inferiority of Black people and the superiority of "the Aryan race." In vain did W.E.B. Du Bois point out that suffering more and dying earlier than everyone else are consequences of discrimination, not a justification for it.

Long before the invention of the general-purpose computer, bureaucrats and researchers had begun gathering and cross-tabulating sets of numbers about populations—heights, weights, ages, sexes, races, political parties, incomes—using punch cards and tabulating machines. By the nineteen-thirties, converting facts into data to be read by machines married the centuries-long quest for universal knowledge to twentieth-century technological utopianism. The Encyclopædia Britannica, first printed in Edinburgh in 1768—a product of the Scottish Enlightenment—had been taken over for much of the nineteen-twenties by Sears, Roebuck, as a product of American mass consumerism. "When in doubt—'Look it up' in the *Encyclopaedia Britannica*," one twentieth-century newspaper ad read. "The Sum of Human Knowledge. *29 volumes, 28,150 pages, 44,000,000 words of text. Printed on thin, but strong opaque India paper, each volume but one inch in thickness.* THE BOOK TO ASK QUESTIONS OF." When in doubt, look it up! But a twenty-nine-volume encyclopedia was too much trouble for the engineer who invented the Cerebral Library, so instead he turned seven hundred and fifty thousand books into networked data. "All the information in that entire library is mine," he cackled. "All I have to do is to operate this machine. I do not have to read a single book." (His boast brings to mind Sam Bankman-Fried, the alleged crypto con man, who in an interview last year memorably said, "I would never read a book.")

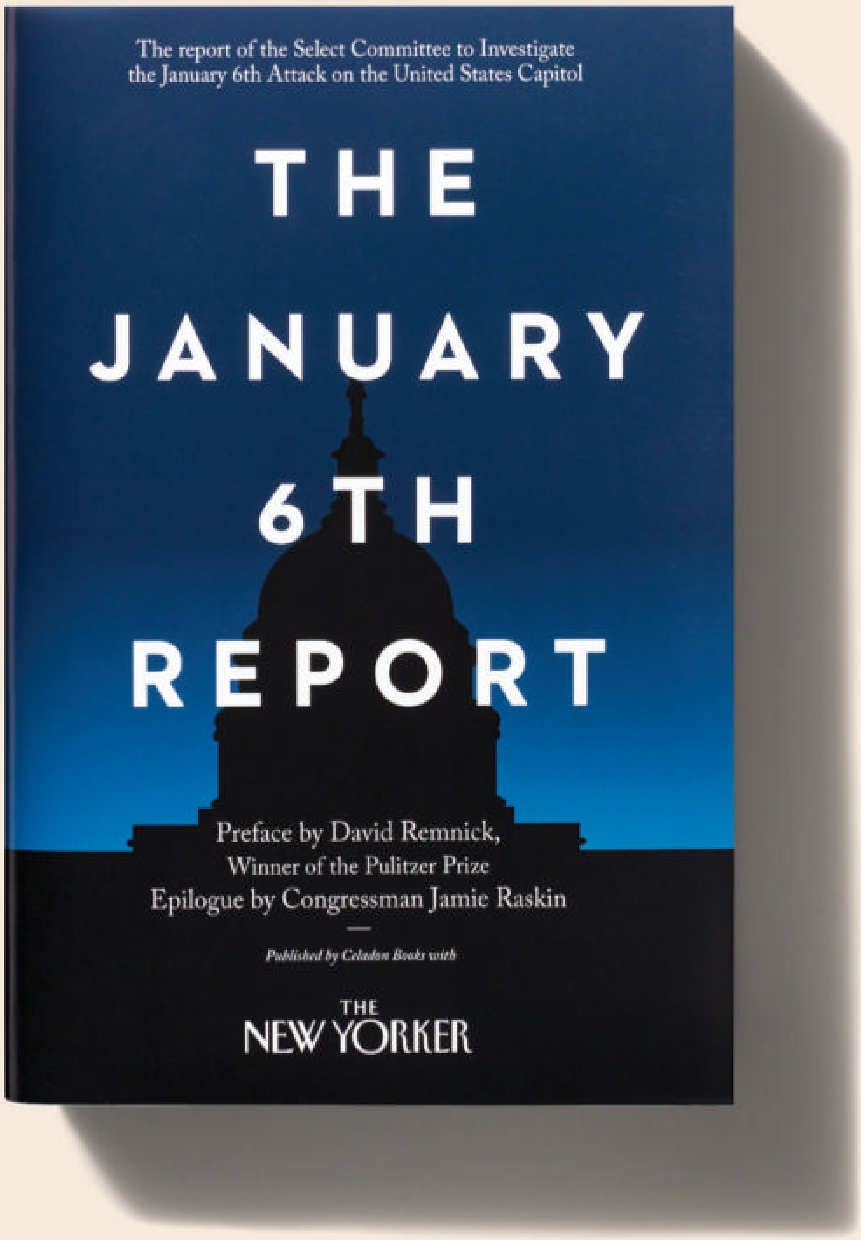
And why bother? By the nineteen-thirties, the fantasy of technological supremacy had found its fullest expression in the Technocracy movement, which, during the Depression, vied with socialism and fascism as an alternative to capitalism and liberal democracy. "Technocracy, briefly stated, is the application of science to the social order," a pamphlet called "Technocracy in Plain Terms" explained in 1939. Technocrats proposed the abolition of all existing economic and political arrangements—governments and banks, for instance—and their replacement by engineers, who would rule by numbers. "Money cannot be used, and its function of purchasing must be replaced by a scientific unit of measurement," the pamphlet elaborated, assuring doubters that nearly everyone "would probably come to like living under a Technate." Under the Technate, humans would no longer need names; they would have numbers. (One Technocrat called himself 1x1809x56.) They dressed in gray suits and drove gray cars. If this sounds familiar—tech bros and their gray hoodies and silver Teslas, cryptocurrency and the abolition of currency—it should. As a political movement, Technocracy fell out of favor in the nineteen-forties, but its logic stuck around. Elon Musk's grandfather was a leader of the Technocracy movement in Canada; he was arrested for being a member, and then, soon after South Africa announced its new policy of apartheid, he moved to Pretoria, where Elon Musk was born, in 1971. One of Musk's children is named X Æ A-12. Welcome to the Technate.

The move from a culture of numbers to a culture of data began during the Second World War, when statistics became more mathematical, largely for the sake of becoming more predictive, which was necessary for wartime applications involving everything from calculating missile trajectories to cracking codes. "This was not data in search of latent truths about humanity or nature," Wiggins and Jones write. "This was not data from small experiments, recorded in small notebooks. This was data motivated by a pressing need—to supply answers in short order that could spur action and save lives." That work continued during the Cold War, as an instrument of the national-security state. Mathematical modelling, increased data-storage capacity, and computer simulation all contributed to the pattern detection and prediction in classified intelligence work, military research, social science, and, increasingly, commerce.

Despite the benefit that these tools provided, especially to researchers in the physical and natural sciences—in the study of stars, say, or molecules—scholars in other fields lamented the distorting effect on their disciplines. In 1954, Claude Lévi-Strauss argued that social scientists need "to break away from the hopelessness of the 'great numbers'—the raft to which the social sciences, lost in an ocean of figures, have been helplessly clinging." By then, national funding agencies had shifted their priorities. The Ford Foundation announced that although it was interested in the human mind, it was no longer keen on non-predictive research in fields like philosophy and political theory, deriding such disciplines as "polemical, speculative, and pre-scientific." The best research would be, like physics, based on "experiment, the accumulation of data, the framing of general theories, attempts to verify the theories, and prediction." Economics and political science became predictive sciences; other ways of knowing in those fields atrophied.

The digitization of human knowledge proceeded apace, with libraries turning books first into microfiche and microfilm and then—through optical character recognition, whose origins date to the nineteen-thirties—into bits and bytes. The field of artificial intelligence, founded in the nineteen-fifties, at first attempted to sift through evidence in order to identify the rules by which humans reason. This approach hit a wall, in a moment known as "the knowledge acquisition bottleneck." The breakthrough came with advances in processing power and the idea of using the vast stores of data that had for decades been compounding in the worlds of both government and industry to teach machines to teach themselves by detecting patterns: machines, learning. "Spies pioneered large-scale data storage," Wiggins and Jones write, but, "starting with the data from airline reservations systems in the 1960s, industry began accumulating data about customers at a rapidly accelerating rate," collecting everything from credit-card transactions and car rentals to library checkout records. In 1962, John Tukey, a mathematician at Bell Labs, called for a new approach that he termed "data analysis," the ancestor of today's "data science." It has its origins in intelligence work and the drive to anticipate the Soviets: what would they do next? That Netflix can predict what you want to watch, that Google knows which sites to serve you—these miracles are the result of tools developed by spies during the Cold War. Commerce in the twenty-first century is espionage for profit.

While all this was going on—the accumulation of data, the emergence of machine learning, and the use of computers not only to calculate but also to communicate—the best thinkers of the age wondered what it might mean for humanity down the line. In 1965, the brilliant and far-seeing engineer J. C. R. Licklider, a chief pioneer of the early Internet, wrote "Libraries



The report of the Select Committee to Investigate the January 6th Attack on the United States Capitol
THE JANUARY 6TH REPORT
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of the Future," in which he considered the many disadvantages of books. "If human interaction with the body of knowledge is conceived of as a dynamic process involving repeated examinations and intercomparisons of very many small and scattered parts, then any concept of a library that begins with books on shelves is sure to encounter trouble," Licklider wrote. "Surveying a million books on ten thousand shelves," he explained, is a nightmare. "When information is stored in books, there is no practical way to transfer the information from the store to the user without physically moving the book or the reader or both." But convert books into data that can be read by a computer, and you can move data from storage to the user, and to any number of users, much more easily. Taking the contents of all the books held in the Library of Congress as a proxy for the sum total of human knowledge, he considered several estimates of its size and figured that it was doubling every couple of decades. On the basis of these numbers, the sum total of human knowledge, as data, would, in the year 2020, be about a dozen petabytes. A zettabyte is a petabyte with six more zeroes after it. So Licklider, who really was a genius, was off by a factor of a hundred thousand.

Consider even the billions of documents that the U.S. government deems "classified," a number that increases by fifty million every year. Good-faith research suggests that as many as nine out of ten of these documents really shouldn't be classified. Unfortunately, no one is making much headway in declassifying them (thousands of documents relating to J.F.K.'s assassination, in 1963, for instance, remain classified). That is a problem for the proper working of government, and for the writing of history, and, not least, for former Presidents and Vice-Presidents.

In "The Declassification Engine: What History Reveals About America's Top Secrets" (Pantheon), the historian Matthew Connelly uses tools first developed for intelligence and counterintelligence purposes—traffic analysis, anomaly detection, and the like—to build what he calls a "declassification engine," a "technology that could help identify truly sensitive information," speed up the declassification of everything else, and, along the way, produce important historical insights. (Connelly, like Wiggins and Jones, is affiliated with Columbia's Data Science Institute.)

The problem is urgent and the project is promising; the results can be underwhelming. After scanning millions of declassified documents from the State Department's "Foreign Relations of the United States" series, for instance, Connelly and his team identified the words most likely to appear before or after redacted text, and found that "Henry Kissinger's name appears more than twice as often as anyone else's." (Kissinger, who was famously secretive, was the Secretary of State from 1973 to 1977.) This is a little like building a mapping tool, setting it loose on Google Earth, and concluding that there are more driveways in the suburbs than there are in the city.

By the beginning of the twenty-first century, commercial, governmental, and academic analysis of data had come to be defined as "data science." From being just one tool with which to produce knowledge, it has become, in many quarters, the only tool. On college campuses across the country, data-science courses and institutes and entire data-science schools are popping up like dandelions in spring, and data scientist is one of the fastest-growing employment categories in the United States. The emergence of a new discipline is thrilling, and it would be even more thrilling if people were still opening all four drawers of that four-drawer filing cabinet, instead of renouncing all other ways of knowing. Wiggins and Jones are careful to note this hazard. "At its most hubristic, data science is presented as a master discipline, capable of reorienting the sciences, the commercial world, and governance itself," they write.

It's easy to think of the ills produced by the hubristic enthusiasm for numbers a century ago, from the I.Q. to the G.D.P. It's easy, too, to think of the ills produced by the hubristic enthusiasm for data today, and for artificial intelligence (including in a part of the Bay Area now known as Cerebral Valley). The worst of those ills most often have to do with making predictions about human behavior and apportioning resources accordingly: using algorithms to set bail or sentences for people accused or convicted of crimes, for instance. Connelly proposes that the computational examination of declassified documents could serve as "the functional equivalent of CT scans and magnetic resonance imaging to examine the body politic." He argues that "history as a data science has to prove itself in the most rigorous way possible: by making predictions about what newly available sources will reveal." But history is not a predictive science, and if it were it wouldn't be history. Legal scholars are making this same move. In "The Equality Machine: Harnessing Digital Technology for a Brighter, More Inclusive Future" (PublicAffairs), Orly Lobel, a University of San Diego law professor, argues that the solution to biases in algorithms is to write better algorithms. Fair enough, except that the result is still rule by algorithms. What if we stopped clinging to the raft of data, returned to the ocean of mystery, and went fishing for facts?

In 1997, when Sergey Brin was a graduate student at Stanford, he wrote a Listserv message about the possible malign consequences of detecting patterns in data and using them to make predictions about human behavior. He had a vague notion that discrimination was among the likely "results of data mining." He considered the insurance industry. "Auto insurance companies analyse accident data and set insurance rates of individuals according to age, gender, vehicle type," he pointed out. "If they were allowed to by law, they would also use race, religion, handicap, and any other attributes they find are related to accident rate." Insurers have been minimizing risk since before the Code of Hammurabi, nearly four thousand years ago. It's an awfully interesting story, but for Brin this was clearly a fleeting thought, not the beginning of an investigation into history, language, philosophy, and ethics. All he knew was that he didn't want to make the world worse. "Don't be evil" became Google's model. But, if you put people's brains in glass jars and burn all your books, bad things do tend to happen. ♦

SHOUTS & MURMURS

LUCI GUTIÉRREZ

UPCOMING LANDMARKS IN ARTIFICIAL INTELLIGENCE

BY HENRY ALFORD

New GPT chatbot learns slight tonal difference between "Hey" and "Heyyyy."

Scientists develop first A.I. police dog that does not require oiling.

Concentration of untruths emanating from ChatGPT bot earns it the nickname "the new George Santos."

Futurist Michio Kaku tells "All Things Considered" that the iPhone is now officially steampunk.

San Francisco's OpenAI lab implants first human with his own autobiographical "Previously on this series . . ." trailer.

Google engineers design virtual tumbleweeds to skitter macabrely across the company's home screen.

Stanford Vision and Learning Lab announces new DALL-E variant that is able to generate image *and* aroma.

Novelists and poets galvanized by chatbots' having provided new reason to embrace alcoholism.

Proliferation of A.I.-derived art causes painters and sculptors to form union, Artists in the Meatspace.

The *Guardian* decries humans' new passive, non-questioning-executive status as "Ivanka, without the cheekbones."

Computer overlords honor World Wide Web pioneer Tim Berners-Lee by coining adverb that denotes foresight, "timbernersly."

First car made from corn syrup goes into beta testing.

Garry Kasparov's chess matches with I.B.M.'s Deep Blue form the backbone of riveting new teledrama from "The Crown" creator Peter Morgan.

"RuPaul's Drag Race" winner alludes to out-of-control nature of the Singularity by renaming self the Spectacularity.

"I do batch normalization" replaces "I create content" as most popular way for millennials to describe themselves at parties.

First autonomous dental floss goes into beta testing.

Concerns about invasion of privacy lead ninety per cent of populace to move to Wi-Fi-less bunkers situated deep within the crust of the earth.

Subterranean crust-dwellers pay top dollar to have professional empathizers visit their bunkers bearing consolation, homemade Mallomars.

Purely virtual Third World War draws comparisons to marital sex by being silent, abstract, and three minutes long.

Third World War results in worldwide destruction and faint buzzing sound.

Survivor Taylor Swift performs new song cycle "All My Exes Are Dead Now."

Citizens of new agrarian society dream of day when they'll be able to buy a new plow via smoke signal.

Elon Musk tells a populace inured to square wagon wheels that his new five-sided wheel "reduces one bump."

Designer of new nation's flag struggles with Latin translation of motto "But is it scalable?"

First donkey goes into beta testing.

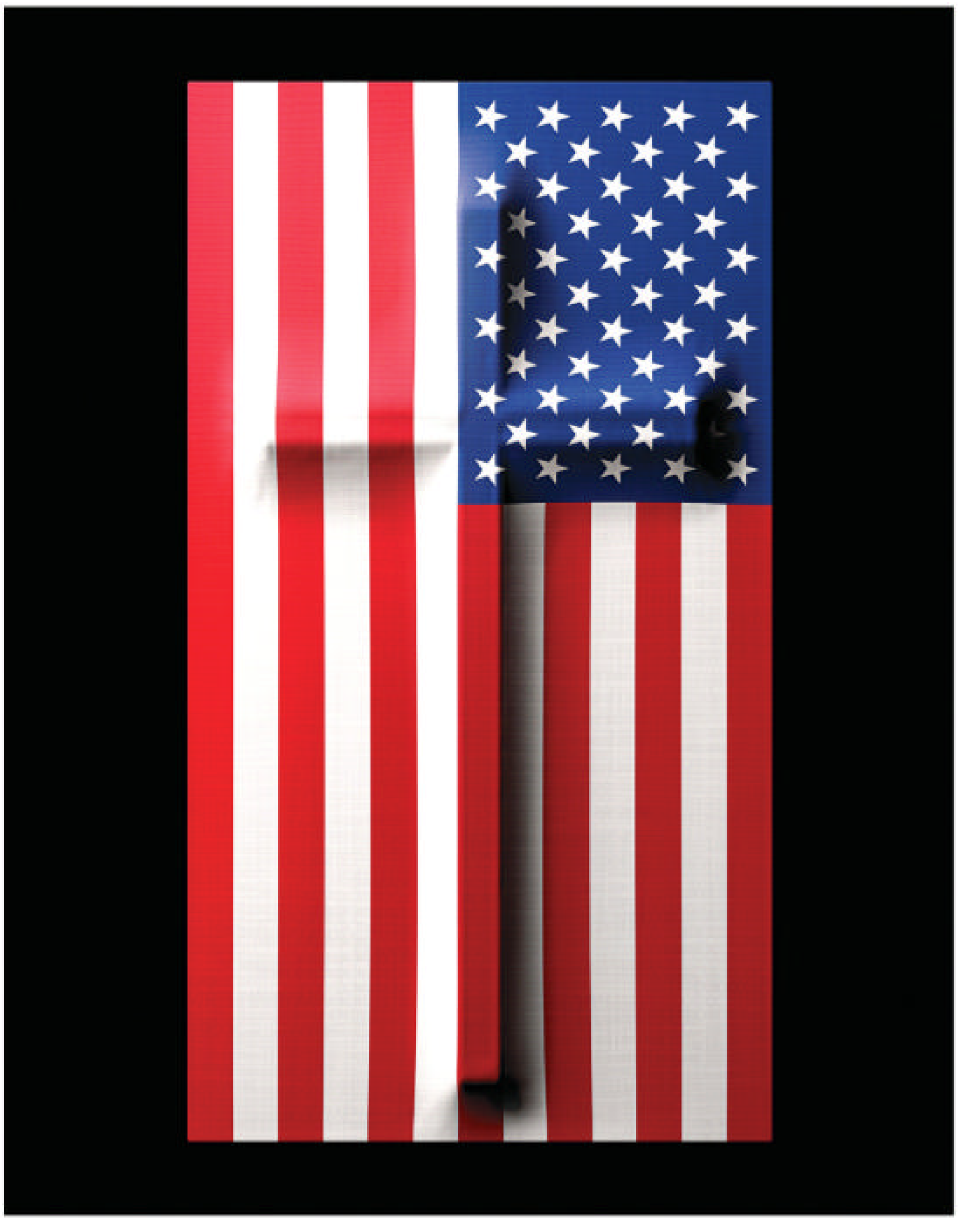
Survivors soothe tribal disputes by vowing to rebuild Dollywood. ♦

ANNALS OF RELIGION

UNDER GOD

How Christian is Christian nationalism?

BY KELEFA SANNEH



Seven years ago, during the Republican Presidential primary, Donald Trump appeared onstage at Dordt University, a Christian institution in Iowa, and made a confession of faith. "I'm a true believer," he said, and he conducted an impromptu poll. "Is everybody a true believer, in this room?" He was scarcely the first Presidential candidate to make a religious appeal, but he might have been the first one to address Christian voters so explicitly as a special interest. "You have the strongest lobby ever," he said. "But I never hear about a 'Christian lobby.'" He made his audience a promise. "If I'm there, you're going to have plenty of power," he said. "You're going to have somebody representing you very, very well."

By the time Trump reluctantly left office, in 2021, his relationship with evangelical Christians was one of the most powerful alliances in American politics. (According to one survey, he won eighty-four per cent of the white evangelical vote in 2020.) On January 6th, when his supporters gathered in Washington to protest the election results, one person brought along a placard depicting Jesus wearing a MAGA hat; during the Capitol invasion, a shirtless protester delivered a prayer on the Senate floor. "Thank you for filling this chamber with patriots that love you, and that love Christ," he said.

The events of January 6th bolstered a growing belief that the alliance between Trump and his Christian supporters had become something more like a movement, a pro-Trump uprising with a distinctive ideology. This ideology is sometimes called "Christian nationalism," a description that often functions as a diagnosis. On a recent episode of "REVcovery," a podcast about leaving Christian ministry, Justin Gentry, one of the hosts, suggested that the belief system was somewhat obscure even to its own adherents. "I think that, spitballing, seventy per cent of Christian nationalists don't know that they're Christian nationalists," he said. "They're just, like, 'This is normal Christianity, from the time of Jesus.'"

In contemporary America, though, the practice of Christianity is starting to seem abnormal. Measures of religious observance in America have shown a steep decrease over the past quarter century. In 1999, Gallup found that seventy per cent of Americans belonged to a church, a synagogue, or a mosque. In 2020, the number was forty-seven per cent—for the first time in nearly a hundred years of polling, worshippers were the minority. This changing environment helps explain the militance that is one of the defining features of Christian nationalism. It is a minority movement, espousing a claim that might not have seemed terribly controversial a few decades ago: that America is, and should remain, a Christian nation.

For many Americans, Christianity is less a creed than an ancestral identity.

There is no canonical manifesto of Christian nationalism, and no single definition of it. In search of rigor, a pair of sociologists, Andrew L. Whitehead and Samuel L. Perry, examined data from various surveys and tracked the replies to six propositions:

> The federal government should declare the United States a Christian nation.
>
> The federal government should advocate Christian values.
>
> The federal government should enforce strict separation of church and state.
>
> The federal government should allow the display of religious symbols in public spaces.
>
> The success of the United States is part of God's plan.
>
> The federal government should allow prayer in public schools.

Respondents who answered more often in the affirmative (or, in the case of the third proposition, the negative) were judged to be more supportive of Christian nationalism, and the scholars con-

ILLUSTRATION BY TIMO LENZEN

ducted interviews with fifty subjects, to get a better sense of who believed what. Near the end of Trump's term, Whitehead and Perry published the results in a book called "Taking America Back for God," in which they predicted a growing schism. "Christian nationalism gives divine sanction to ethnocentrism and nativism," they wrote, noting that a number of respondents doubted that immigrants or non-English speakers could ever be "truly American." Christian nationalism was, they argued, a divisive creed; its adherents were more likely than other groups to believe "that Muslims and Atheists hold morally inferior values."

Perry expanded this argument last year in "The Flag and the Cross," which he wrote with the sociologist Philip S. Gorski. For many people, Gorski and Perry argue, "Christian" refers less to theology than to heritage. Drawing on their own survey, they found that more than a fifth of respondents who wanted the government to declare the U.S. a "Christian nation" also described themselves as being "secular," or an adherent of a non-Christian faith. Paradoxically, so did more than fifteen per cent of self-identified Christians. This last data point might be a sign that "Christian" is starting to become something more like "Jewish": an ancestral identity that you can keep, even if you don't keep the faith. There are, of course, plenty of nonwhite Christians in America, and even nonwhite Christian nationalists. (In the earlier book, Whitehead and Perry reported that Black Americans were in fact more likely than any other racial group to support Christian nationalism.) But Gorski and Perry argue that in American politics Christian nationalism has often served as a white-identity movement. They note, for instance, that white Americans who support Christian nationalism are likelier to evince disapproval of immigration and concern about anti-white discrimination. And they worry that "white Christian nationalism is working just beneath the surface" of American politics, ready to trigger an outburst, as it did on January 6th. "There will be another eruption—and soon," they write.

Gorski and Perry warn that a second Trump Administration might lead to "Jim Crow 2.0," with "non-white, undocumented immigrants" singled out for "mass deportations on an unprecedented scale." But they also note that the white Christian nationalists in their survey expressed the most hostility not toward immigrants or toward Muslims but toward socialists. In this, the Christian nationalists are firmly within the historical mainstream of American conservatism. That may also be true even of those respondents who wish to "institutionalize Christian identity and values in the public square," given all the ways in which America remains distinctively and sometimes officially Christian. (The federal government shuts down on Christmas, for instance, and on no other religious holiday; even in New York, there are special restrictions on the sale of alcohol on Sunday, the Christian Sabbath.) An allegedly insurgent demand is, in a way, a description of the status quo.

As a whole, the six Christian-nationalist propositions appear to be correlated with all sorts of other ideas and impulses. But, examined individually, most of them aren't hard to defend. School prayer has been the subject of a series of fine-grained Supreme Court decisions; this past summer, the Court ruled, 6–3, in favor of a high-school football coach who liked to pray on the field after games. As for whether it is God's plan that the United States succeed, even someone with nuanced views about Providence and predestination might nevertheless hope so. To a secular liberal, it might seem distasteful for a Christian to consider Muslim or atheistic values "morally inferior," or to want the government to promote "Christian values." But to claim any set of values as your own is to find them superior, in some meaningful sense, to the alternatives, and probably to hope that they will guide the decisions that your government makes on your behalf. In any case, it is impossible to separate the Christian history of America from the country we live in today. Both the secularization of the country and the counterreaction to that secularization are reflections, in different ways, of a country founded on ideals of faith and freedom.

Anyone looking for a charter of American Christian nationalism might begin in 1630, the year John Winthrop, the future governor of the Massachusetts Bay Colony, delivered his speech comparing the settlement to a "city upon a hill," in "covenant" with God, serving as a beacon to "all people." (The famous phrase came from Jesus' Sermon on the Mount: "Ye are the light of the world. A city that is set on a hill cannot be hid.") In the eighteenth century, arguments for American independence were often cast in religious terms. Congregationalists, who structured their churches around ideals of self-governance and free conscience, were particularly influential: Jonathan Mayhew, a Congregational minister in Boston, published a sermon in 1750 in which he denounced the "tyranny and oppression" of Charles I, the former king. (One of Charles's transgressions: "He authorized a book in favor of sports upon the *Lord's day*"; on this front, anyway, America is indisputably less Christian than it used to be.) And in November, 1777, the Continental Congress issued a message of wartime commemoration and gratitude—it is sometimes considered the first Thanksgiving proclamation—which extolled "the Principles of true Liberty, Virtue, and Piety." There is a certain tension, of course, between the principle of liberty and that of piety: in 1791, the First Amendment to the Constitution prohibited the "establishment of religion" by the new federal government, but Massachusetts did not officially break with the Congregational Church until 1833.

Then, as now, Christian identity in America was often tribal—which is to say, anti-tribal. In a fascinating book called "Heathen," the religious historian Kathryn Gin Lum suggests that, in many times and places, the divide between Christian and "heathen" was the central divide in American life. The original British colonies were sometimes taken to be efforts to promote the "propagation of the Gospel of Jesus Christ amongst those poor heathen," as a 1649 act of Parliament declared. The term could justify both exclusion and engagement: the scourge of heathenism was later adduced as a reason to oppose Chinese immigration to California, and to support the annexation of the Hawaiian Islands. But "heathen" is an unstable identity, because it denotes a condition that ought to be cured. A heathen is someone who has not yet been exposed to and converted to Christianity.

Africans and their descendants were sometimes held to be heathens of a peculiar sort, because they were considered to be both a Biblical people and a cursed one: descendants of Canaan, the son of

Ham and grandson of Noah. In the Bible, Ham has an ambiguous encounter with a drunk and naked Noah, and is punished with a generational affliction: "Cursed be Canaan; A servant of servants shall he be unto his brethren." Frederick Douglass, in his autobiography, described this view of Africans as a perversion of the Bible. He wrote that he abhorred what he called "the religion of the South," but also that he cherished "the pure, peaceable, and impartial Christianity of Christ." He was making a version of an argument that appears throughout American history: that this country is not truly Christian enough.

Across the centuries, the political power of Christianity has waxed and waned, in tandem with waves of religious revival and retreat, and with the needs and aspirations of politicians. In 1899, a newly elected U.S. senator, Albert J. Beveridge, endorsed the conquest of the Philippines in starkly missionary terms, declaring, "It is ours to bear the torch of Christianity where midnight has reigned a thousand years." Judging from church-membership figures, the nineteen-fifties may have been the most pious period in American history; it was the decade when the phrase "under God" was added to the Pledge of Allegiance (1954), and when "In God we trust" was adopted as the country's official motto (1956). By then, politicians were talking less about heathenism and more about a new adversary; many, like Senator Joseph McCarthy, believed that America was "engaged in a final, all-out battle between Communistic atheism and Christianity." In America, Christianity works best as an organizing principle when there is a strong non-Christian force to organize against.

In "The Religion of American Greatness: What's Wrong with Christian Nationalism," Paul D. Miller, a political scientist at Georgetown, tries to make sense of this complicated history. He is, he writes, a Christian, and a patriot, "proudly pro-life" and "a zealot for religious liberty." Yet he thinks there is a difference between leaders who humbly seek God's guidance and those who insist, as Jerry Falwell once did, that "when a nation's ways please the Lord, that nation is blessed with supernatural help." Miller wants Christians to be more aware of "the undemocratic elements of the founding," and more willing to consider the possibility that America's history since then has been, in some ways, "a gradual story of progress." In place of Christian nationalism, he advocates something more abstract: an acknowledgment that "Anglo-Protestant culture" has shaped America's ideals, and a hope that those ideals will endure, even as culture changes.

In the face of all this disapproval, a few intellectuals have decided to claim the term for themselves. In "The Case for Christian Nationalism," Stephen Wolfe, a political philosopher and faithful Presbyterian, advances a series of syllogisms designed to convince believers that they must help America become more Christian, and more of a nation. But the country he wants to bring about seems less a realistic future for America than a thought experiment—occasionally a sinister one. (Wolfe's Protestant vision sometimes evokes the Catholic "integralists," who dream of building an unapologetically Catholic state.) He has firm opinions on whether non-Christians are "entitled to political equality" (no), whether "political atheism" should be excluded from the bounds of "acceptable opinion" (yes), and whether "arch-heretics" can justifiably be put to death (yes). In Wolfe's view, Christians are too quick to dismiss the virtue of tribalism—the notion that people are drawn to others who share their "ethnicity," a word he uses to gesture at a wide range of traits. (Ethnicity, as he defines it, is not just "blood ties" but also "language, manners, customs, stories, taboos, rituals, calendars, social expectations, duties, loves, and religion.") At one point, Wolfe disparages "ethnic identity politics," but elsewhere he suggests that "in some cases amicable ethnic separation along political lines" might be beneficial for everyone.

Wolfe's book avoids explicit claims about race, but after its publication, in November, a shadow was cast over it by an investigation that Alastair Roberts, an English theologian, conducted into the public writing of one of Wolfe's close friends and collaborators, Thomas Achord. (Achord hosted a podcast with Wolfe.) Roberts assembled evidence that Achord, under a pseudonym, had been posting online in support of what he called "robust race realist white nationalism." Roberts pointed to a Twitter account that had responded to a post from the American Jewish Committee by writing, "OK jew," and referred to Representative Cori Bush, of Missouri, as a "Ngress." In response to a discussion of white supremacy by Jemar Tisby, a prominent Black historian of Christianity, the account posted, "Please leave soon. —Sincerely, All White Peoples."

Achord parted ways with a Christian school in Louisiana where he had been

"We think he can still hear you."

headmaster, and said that the posts, most of them from 2020 or 2021, reflected "a spiritually dark time marked by pessimism and anger and strained relationships." While he eventually admitted that the Twitter account in question was his, he said he had "trouble recollecting" posts connected to it. (Achord could not be reached for comment.) Wolfe, who had defended Achord and had pledged some of his book royalties to him, wrote a Twitter thread "repudiating" the old tweets, and asking that his book be judged on its own merits. But the Achord affair made it clear that even a sympathetic reader of Wolfe's book could be confused about how, exactly, an ideology of "amicable ethnic separation" might differ from white nationalism.

The scandal was a big deal in the small world of intellectual Christian nationalism. One difference between Wolfe and someone like Jerry Falwell, who believed many of the same things, is that Falwell could plausibly claim to be leading what he called a "moral majority," whereas many of today's Christian nationalists are keenly aware of their minority status—and perhaps, as a consequence, less likely to worry about transgressing dominant social norms. In today's America, anyone eager to denounce "sodomy" is marking himself as a dissident: not a defender of American culture as it currently exists but, rather, an enemy of it. "Christian nationalist," as sociologists and pundits use the term, refers to a broad array of conservatives, concerned—as conservatives always are—about the way their country is changing. But those who embrace the term are a much smaller, self-selected group: in this climate, calling yourself a Christian nationalist is a much more radical act than merely being one.

The Presidency of George W. Bush was a high-water mark for Christian politics. Bush launched initiatives to support "faith-based organizations," and brought a missionary's fervor to the promotion of democracy in the Middle East and, much more successfully, AIDS treatment in Africa. By contrast, Trump was perhaps the least Christian President in modern times; although he kept his promise to anti-abortion Christian voters by appointing three Supreme Court Justices who helped overturn Roe v. Wade, he seemed to view this not as a moral triumph but as a favor for a special interest. (During a recent interview, Trump said, "They won—Roe v. Wade, they won!" In this formulation, "they" meant the Christian lobby, and Trump expressed disappointment that "they" hadn't done more to support his preferred candidates during the 2022 midterms.) And, though some of Trump's supporters put Christian identity front and center, others are harder to categorize. The January 6th protester who prayed in the Senate, for instance, was Jake Angeli, known as the QAnon Shaman, who had previously referred to himself as part of a "light occultic force." During his prayer, Angeli thanked God for the "divine, omnipresent white light of love and protection, peace and harmony": this is the language of "lightworkers" and of other contemporary spiritualists. Perhaps a shaman is the perfect figurehead for a movement defined by Christian heritage, not Christian faith. America may now be following the trajectory of Europe, where Viktor Orbán, the Prime Minister of Hungary, talks about the importance of "Christian roots," even though fewer than twenty per cent of Hungarians attend church regularly. If the rise of Christian nationalism in America reflects the decline of Christianity, that is bittersweet news for secular liberals, because it means that they might expect to see more and more of it as the country grows less pious.

How did this decline happen? No one seems to know. Sociologists such as Gorski and Perry can tell us that Christian-nationalist beliefs reflect a tribal or partisan identity, but they can't tell us why so many self-identified Christians seem uninterested in the religion itself. Miller, for his part, seems confident that the Christian values he cherishes can endure and thrive, even in an increasingly post-Christian country, but it's not clear why. The question is even more urgent for someone like Wolfe, who portrays America as a formerly Christian polity undermined by immigration and relativism. If America was once better than it is now, why did our Christian forebears allow it to get worse? In answering this question, Wolfe sometimes sounds more like a critic of the faith than a defender of it. Christian majorities, he contends, too often refuse to wield government power when they have it, insisting on official neutrality in ways that Muslim majorities, for instance, typically don't. "Western Christians gaze at the ravishment of their Western heritage," he writes, "either blaming themselves or, even worse, reveling in their humiliation." He could almost be quoting Nietzsche, who excoriated Christianity for its ethic of mercy and self-sacrifice, for siding with "the weak, the low, the botched." Wolfe thinks that there is something "weird" about the way in which the U.S. and other Western nations reject ethnic chauvinism—officially, anyway—in favor of an "ideology of universality." But this weird universality is part of what sets Christianity apart from most other creeds. Tellingly, one of the scholars who blurbed Wolfe's book was the Israeli political scientist Yoram Hazony, who has suggested that American nationalists should draw inspiration from the example of Israel, which conceives of itself as "the national state of a particular people."

The strangest thing about the debate over Christian nationalism is the assumption shared by many of the participants. The sociologists see a fearful tribe, resentful of a country that won't stop changing. Exponents see a small but indomitable movement, standing strong against a tide of secularism. Miller sees an opportunity for Christians to play a constructive role in a changing country, preaching what their compatriots may no longer practice. But the underlying idea is that recent trends will continue: that churches will keep emptying out, and that Christianity will become an ever more tribal identity. The secular country that emerges might be increasingly free, anxious, and unpredictable—less prayer in schools, more shamans in the Capitol. Why should we assume, though, that these trends are irreversible, and that most of today's Americans are beyond the reach of a message that has reached so many for so long? Earlier periods of secularization in America have given way to periods of Christian renewal. Is the next Christian revival just around the corner? It seems hard to believe—but, surely, not impossible. ♦

A REPORTER AT LARGE

THE SMEAR FACTORY

Rumors ruined Hazim Nada's business. Hackers told him who did it.

BY DAVID D. KIRKPATRICK

In the summer of 2017, Hazim Nada, a thirty-four-year-old American living in Como, Italy, received an automated text message from his mobile-phone carrier: How was our customer service? Puzzled, he called a friend at the company. Someone impersonating Nada had obtained copies of his call history. A few weeks later, his account manager at Credit Suisse alerted him that an impostor who sounded nothing like Nada—he has a slightly nasal, almost childlike voice—had phoned and asked for banking details. "I started to feel like somebody was trying to scam me," Nada told me.

Nada was the founder of a nine-year-old commodities-trading business, Lord Energy. The "Lord" stood for "liquid or dry," because the company shipped both crude oil and such drygoods as cement and corn. He had carved out a lucrative niche by establishing unconventional routes: Libya to Korea, Gabon to Italy. By the summer of 2017, Lord Energy, which was based in Lugano, a Swiss city across the border from Como, had a satellite office in Singapore, another opening in Houston, and annual revenue approaching two billion dollars.

Nada, whose parents emigrated from Egypt and Syria, is tall and slender, with curly dark hair that's neat at the sides and unruly on top. He'd recently married a Saudi woman he met while she was vacationing with her family in Switzerland. They now had a daughter, and were renovating a historic Liberty-style mansion that sat on a wooded hill overlooking Lake Como. The property's sweeping views and hillside swimming pool were so spectacular that George Clooney—a neighbor—had filmed a Nespresso commercial there, along with Jack Black and various glamorous women; the ad's running gag was the preposterous decadence of the setting. As a hobby, Nada had earned a pilot's license and also taken up skydiving. That March, he had opened a second business, outside Milan: a vertical wind tunnel, which the Italian military and the United States Air Force used to train paratroopers.

Though Nada enjoyed his success, he sometimes worried that his life lacked mission, especially when he compared himself with his father, Youssef, then eighty-six. Youssef had joined the Muslim Brotherhood, the original Islamist movement, as a teen-ager in Alexandria, in 1947, during the group's founding decades. He never engaged in violence, not even in the riots preceding the 1952 coup that deposed Egypt's British-backed monarchy. But, as the coup's leaders consolidated their power, they jailed thousands of Brotherhood members, including Youssef. He spent two years in prison, went into exile, and amassed a fortune in business—in Libya, Austria, the United States, and finally in Switzerland. He founded a bank that, following Islamic tradition, did not charge conventional interest, and he became a major donor to and an international emissary for the Brotherhood. He liked to call himself the movement's foreign minister.

Hazim, in contrast, was planted firmly in the West. Born in Silver Spring, Maryland, he was bored by politics, casual about religion, proud of his American identity, and a fan of nineties hip-hop. He visited Egypt once, then never wanted to return. Hazim's passion was theoretical physics. After graduating from Rutgers, he'd received a master's in physics at Cambridge University and a doctorate in applied math at Imperial College London. Oil trading had started as a side gig: his father's business empire had fallen apart while Hazim was at Rutgers, and he traded commodities to pay for his graduate studies. Now oil had made Hazim richer than physics ever could have. He still missed research, and he daydreamed about going into the

Nada said, "This stuff should not be allowed

to happen—that some dictator or his consultants decide for their own reasons to target citizens of a democracy and ruin their lives."

PHOTOGRAPH BY MATTIA BALSAMINI

electric-vehicle business, partly to atone for shipping so much planet-warming fuel. But, before those suspicious calls started, his most pressing problem was an invasion of wild boars onto his property. He hunted them with a crossbow.

In the fall of 2017, there was another deceptive call. A man pretending to represent Citibank contacted Nada's company and requested banking information about Lord Energy, claiming that he wanted to process a payment. Then, that December, the company unexpectedly appeared in a gossipy online publication called Africa Intelligence. The item was ostensibly about a delay in a Lord Energy tanker's departure from Algeria. Nada had kept the tanker anchored for minor repairs, but Africa Intelligence said that Algerian authorities had blocked it. Odder still, the article insinuated that the delay was linked to the implosion of his father's bank, after the terrorist attacks of September 11, 2001.

Youssef Nada and other Brotherhood leaders had long condemned the use of violence—indeed, the militants of Al Qaeda had denounced them as timid. But the Brotherhood did give rhetorical support to the Palestinian group Hamas, describing its fight against Israel as legitimate resistance, and the Egyptian strongman Hosni Mubarak had cited this as evidence that the Brotherhood was itself a terrorist group. Youssef Nada, the Egyptians argued, was essentially Osama bin Laden in a banker's suit. After 9/11, the U.S. government, too, adopted this view of Youssef Nada. President George W. Bush publicly accused him of helping Al Qaeda "shift money around the world." Switzerland and the European Union imposed sanctions. Police searched his home. Financial institutions froze his assets. His fortune collapsed.

For more than a decade, Youssef fought to clear his name. He won a libel suit against a journalist at an Italian newspaper who had accused him of financially supporting Hamas. Dick Marty, a former Swiss senator and prosecutor, conducted an investigation of the sanctions against Youssef, and in 2007 he concluded that the blacklisting had been "totally arbitrary" and "Kafkaesque." Five years later, a European court ruled that the Swiss restrictions on Nada had baselessly violated his human rights. On February 26, 2015, the U.S. Treasury Department removed him from its roster of "Global Terrorists," telling him in a terse letter that the "circumstances resulting in your designation . . . no longer apply."

When Hazim Nada started Lord Energy, in 2008, he was forced to prove to each banker he met that his venture bore no connection to his father. Africa Intelligence now portrayed Lord Energy as a new incarnation of the family business. Throughout the "legal marathon" over the terrorism charges, the publication asserted, "the Nada family continued to operate its commercial activities"—including trading Algerian oil.

Hazim assumed that a competitor had planted the item. But soon other wild allegations began appearing—too many to be chalked up to industry chatter. On January 5, 2018, Sylvain Besson, a journalist who had written a book purporting to tie Youssef Nada to a supposed Islamist conspiracy, published an article, in the Geneva newspaper *Le Temps*, claiming that Lord Energy was a cover for a Muslim Brotherhood cell. "The children of the historical leaders of the organization have recycled themselves in oil and gas," Besson wrote. A new item in Africa Intelligence hinted darkly that Lord Energy employees had "been active in the political-religious sphere." Headlines sprang up on Web sites, such as Medium, that had little editorial oversight: "Lord Energy: The Mysterious Company Linking Al-Qaeda and the Muslim Brotherhood"; "Compliance: Muslim Brotherhood Trading Company Lord Energy Linked to Crédit Suisse." A Wikipedia entry for Lord Energy suddenly included descriptions of alleged ties to terrorism.

Six months after the first Africa Intelligence item, World-Check, a database that banks rely on to vet customers, listed both Hazim and Lord Energy under the risk category "Terrorism." Five financial institutions walked away from negotiations with Nada. UBS cancelled his personal checking account—and his mother's, too.

Nine days later, World-Check deleted the listing. "An error was made," a lawyer for the company wrote to Nada, offering a "letter of apology" that he could show to lenders. But the damage had been done. In December, 2018, his longtime bankers at Credit Suisse stopped doing business with Lord Energy.

Dick Marty, the former Swiss prosecutor, accompanied Nada to the office of a UBS regional manager to try to clear up the matter. The manager, whose desk was covered with printouts of the incendiary articles and Web posts, told them that the mere appearance of a terrorism link was too much for the bank, regardless of the truth. A campaign of unproven allegations had ruined Nada's father, Marty thought, and now the same thing was happening to Hazim. But although Marty knew why Mubarak loathed Youssef, he couldn't understand the targeting of Hazim. "He is not the fanatical type," Marty told me.

Lord Energy, unable to finance its shipments, laid off its employees. Nada was so distraught that he couldn't sleep. One night, he took a pill for his insomnia, but its effect was short-lived, and he woke to a panic attack, shivering and shaking. "I was running around, screaming like a madman for about six hours," he told me. When his family took him to a hospital, he said, "the doctor sedated me like an elephant."

Panic attacks kept coming for months. "I had creditors running after me from all across the world—the U.S., South Korea, Gabon, you name it," he said. "It was horrible." That April, Lord Energy ceased operations and sought bankruptcy protection.

Nada complained to the Swiss police that someone was orchestrating a campaign to defame him. After a cursory investigation, an officer met with him to explain why the department was closing the matter. When the officer left the room for a few minutes, Nada found himself alone with the case file. Desperate for answers, he riffled through it. The officer had written notes dismissing him as paranoid, Nada told me. (The local police and prosecutor declined to comment.) But the police had also obtained copies of requests for records about Lord Energy and a local mosque. Both had been filed by a Geneva-based private intelligence firm, Alp Services.

"I feel like we've outgrown the bar scene."

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Alp is the creation of Mario Brero, whom *Le Temps* has called "the pope" of Swiss investigators. Born in 1946, he works out of a third-floor walkup above a bakery on Rue de Montchoisy, a few blocks from Lake Geneva. When I knocked on the door, in December of last year, a tiny dog in a red sweater scampered under a Christmas tree in the foyer. Former employees told me that Brero cultivates a familial atmosphere at his office. But when a junior associate leaves he shrieks of betrayal and threatens legal action.

Brero came into the hall dressed in a three-piece suit; tall and heavyset, he walked with his hands plunged deep into his pants pockets, accentuating his roundness. "Hello—goodbye," he said, immediately ushering me out. He never talked to journalists, he explained, citing client confidentiality. "I am an old man," he added, twirling his neck-length gray hair.

French-language news reports and former employees say that Brero represents himself as a graduate of a prestigious engineering institute in Lausanne. Records indicate that he left after a semester. (The school declined to discuss his academic record.) It's unclear how he started his career, but by 1986 he was running a business exporting computers and semiconductor-manufacturing equipment from the United States to Europe. Federal prosecutors in San Francisco indicted him for violating laws against exporting sensitive American technologies to the Eastern Bloc—he'd set up a system of straw buyers in Western Europe. Brero denied the charges but resolved them by signing a consent decree and exiting the business.

Former Alp employees told me that Brero characterizes his brush with American law as the beginning of his private-intelligence career. As he recounts it, he somehow came into contact with Jules Kroll, the American forefather of the modern corporate-intelligence industry, and Kroll persuaded him to start over as an investigator in the secretive banking center of Geneva. (Kroll says that he has no memory of Brero.)

It was an astute decision: the city has become a booming hub of the intelligence business. Geneva banks need to perform due diligence on prospective clients. Its law firms need research for litigation. And the foreign élite who park their assets in Switzerland need private spies for their disputes and divorces. Moreover, the Swiss authorities have cultivated a pointedly hands-off approach to regulation. Although Switzerland is most notorious for banking secrecy, it also asks few questions of private intelligence firms, making Geneva an attractive choice for clients eager to avoid scrutiny.

Brero opened Alp in 1989, and fiercely defended his turf. When a British intelligence firm, Diligence, was launching a Geneva branch in 2007, Brero incorporated a second firm, called Diligence SARL, at Alp's address, confusing potential clients. But there was more than enough business to go around. News reports noted that Brero drove a Porsche Cayenne and docked a motorboat on the lake.

Brero's business initially focussed on mundane work for banks and law firms, along with a few big-ticket divorces, but in 2012 a French scandal put him in the headlines. The chief of the mining division at the French nuclear-power giant Areva had, without informing his bosses, hired Brero to investigate potential fraud by its chief executive, Anne Lauvergeon, or by others involved in the disastrous $2.5-billion acquisition of a Canadian mining company. No evidence of corruption emerged, but Lauvergeon got wind of Brero's snooping, and she and her husband brought charges of invasion of privacy against him in a French court. Brero seemed to relish the attention: at the trial, he teased the prosecutors for the amusement of the crowd, and spoke candidly about obtaining tax records from Switzerland showing that Lauvergeon's husband, who is French, had spirited away money there. "Legality isn't the same everywhere," Brero testified. "In France, the only way to get tax information on a citizen is illegal." But, in the Swiss canton of Vaud, "for ten francs it is absolutely possible." (How did Brero come to suspect that Lauvergeon's husband had paid Swiss taxes? In court, lawyers for Lauvergeon's husband contended that Alp had illegally obtained some of his French tax records. Two former Alp employees confirmed this to me, explaining that Brero had received them from a French investigator with inside connections, prompting a look across the border.)

At the same time, Brero acknowledged violating Swiss law. He said that he'd paid phone-company employees for bills listing customer calls, sometimes using another private intelligence agent as an intermediary. "I know that the work done by these sources is illegal," Brero testified. He refused to name his sources in court, but Swiss prosecutors subsequently arrested the agent and three phone-company employees in connection with the sale of call histories, and *Le Monde* suggested that Brero had betrayed his accomplices to protect himself. The trial also exposed other unseemly assignments that Brero had discussed with Areva—such as spying on Greenpeace—and some embarrassing e-mails. Brero had written to a client, "Despite my large size, I have the flexibility of a cat combined with that of a Bolshoi ballerina." (Brero did not respond to detailed questions from me, including some about the Areva case.)

The scandal transformed his business. Although the French court imposed only a token penalty on Brero, he was convicted of inducing a phone-company employee to disclose customer data and of disseminating information acquired by illegal means. Former employees told me that the verdict drove away reputation-conscious law firms, banks, and corporations, along with international corporate-investigations giants, such as Kroll, that had previously subcontracted to Brero. At the same time, the Areva affair brought Alp less squeamish customers: oligarchs from the former Soviet Union, politicians and businessmen from small African states, sheikhs and tycoons from the Middle East. "They came from the East and the South," a former Alp employee told me. "And they were very demanding."

Brero recast his sales pitch, talking up his ability to spread negative information instead of merely collecting it. He now described his specialty as "offensive viral communication campaigns."

After Nada met with the Swiss police officer, he fired off an e-mail to the general mailbox listed on Alp's Web site, complaining of "fraud and prank calling to obtain private information regarding our company" and proposing to resolve the matter "amicably." He received no response, and he was too busy settling the claims of Lord Energy's creditors to follow up immediately. But the name Alp Services never escaped his mind. In early 2021, Nada e-mailed the company again, threatening "personal and professional repercussions on your agents and firm" if Alp did not correct the false allegations it appeared to have spread. By that April, his wife was about to give birth to their second child, and the stress of Lord Energy's collapse was straining his marriage.

That is when he received an encrypted message from an unfamiliar French number. The sender, who refused to give a name, claimed to speak for a group of vigilante hackers who had penetrated the online accounts of Alp Services. As proof, the sender presented Nada with a copy of the threatening e-mail that he'd sent to the Alp in-box. His head was spinning: Was this a ruse by Alp itself? Then the contact showed Nada internal Alp e-mails directing operatives to write the online articles calling him an extremist. Nada could scarcely control his rage. "If I did not have a family, I think I would have gotten a gun and driven all the way to Geneva," he told me.

The hackers sent him messages in an idiosyncratic English sprinkled with French and Italian cognates, and the style varied over time. Nada assumed that he was dealing with a group of Europeans. "The guys," as Nada thought of them, sometimes sounded righteous, as if they were activists out to expose Brero's wrongdoing, but their main motive was clear. "They asked me to pay them," Nada told me. Had the hackers targeted Alp as part

REINCARNATION

Sometimes when I look at our dog Jack I think
he might be my Radical American History professor come back
to make amends
—he gazes at me so sorrowfully.

What is it Jack, I say, why do you look like that? But Jack
doesn't answer; he lies down and rests his head on his paws.

Black hair covered nearly all of that man's body, thick
under his blue oxford shirt when I put my hand there.
Perhaps that accounted for the bow tie,
the pipe, the tweed cap.

This time I can teach him to sit and to stay.
Stay, I say to Jack, who looks at the treat in my hand
and then at me, and at the treat and then at me, and he stays.

Come, I say to Jack, but Jack does not always come.
Sometimes he sits and looks at me a long time
as when my professor would lean back in his chair
draw on his pipe and gaze at me.

But when I hold a treat Jack comes, and I remember how
the professor would lick dripping honey from the jar
lick peanut butter from the knife.

A little stubborn, our dog Jack,
shy, we thought
until the morning my daughter jumped on my bed
and Jack sprang at her growling.

And the next morning, when he rushed toward her growling
and bit her skirt and tore it, and bit her and broke her skin,
and when I went to collar him, bit me, snarling, and bit and bit.

That's when I was pretty sure he was my history professor.

The vet said this happens more often than you'd imagine.
He must always be tethered, she said, until he can be trusted.
He must learn that you and your daughter come first.
And no more couch, and no more sleeping in the bed with you, Mama,
not ever.

I finally left him so late at night it was nearly dawn—
picking up my boots by the door,
stepping down the two flights, then running toward the car.

What can I say? Jack may be my American History professor come back,
after all these years, to make amends,

or Jack may be actually himself—a dog.

—*Marie Howe*

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of some unrelated dispute and then discovered something that they thought they could sell? Or had they targeted a Geneva private detective on the hunch that he must hold valuable secrets?

Either way, they offered to sell Nada their Alp files—terabytes of stolen material, including e-mails, proposals and reports, photographs, invoices, and recorded phone calls—for thirty million dollars in crypto. He told the hackers that he was neither willing nor able to pay them for their information, but the messages kept coming. After about two weeks, the hackers made a different request: they wanted Nada to act as a messenger, relaying their sales pitch to a wealthier potential buyer. Thieves were pressing Nada to fence their stolen treasure. Yet the chance for revenge was hard to resist.

Nada, concerned that he might be accused of having abetted the hacking, reported it to the Swiss authorities within two days of the first contact. A Swiss intelligence agent, Antonio Covre, went to the hospital where Nada's wife was giving birth and took photographs of the encrypted messages. Nada showed me e-mails that he'd sent to the local police about the hack. Nobody followed up. (A lawyer for Alp asserted, without seeing the stolen files, that some were "obviously forged." But the lawyer declined to specify which files he doubted, and I was able to corroborate hundreds of private details contained in the leak.)

To draw Nada in, the hackers let him browse through the stolen cache, restricting him only from downloading any of it. "The guys" made no effort to curate the leak by highlighting some files or hiding others, as many hackers do. Nada, unsure what to do, pored over it all with a mixture of fury and fascination. He stopped sleeping again as he scrolled endlessly through the trove. "I was really swimming in darkness, seeing all these bad plans and this evil machine," he told me. "When I was in the car alone, I would start screaming in anger." He rolled his eyes at the way Alp pitched prospective customers. "We are mercenaries but we have our ethics," Brero sometimes wrote. "We only work with clients with whom we share the same values."

If so, Brero shared the values of a remarkable array of characters. The files revealed that he had done intelligence operations for many foreign governments, or for individuals close to them. The list included Kazakhstan, Montenegro, Congo, Nigeria, Gabon, Monaco, Angola, Uzbekistan, and Saudi Arabia. He appeared to have done work on behalf of the Hollywood filmmaker Bryan Singer, the director of "Bohemian Rhapsody," who has been accused several times of sexual assault. (A lawyer for Singer, who has denied the assault allegations, said that Singer was not available for comment.) Other revelations: Brero had done investigations for the French fashion tycoon Bernard Arnault, for the Israeli mining baron Beny Steinmetz, and for a roster of billionaires from Eastern Europe, including Bulat Utemuratov, of Kazakhstan, and Oleg Deripaska, Dmitry Rybolovlev, and Vladimir Smirnov, of Russia. (A spokesperson for Arnault declined to comment, and the other clients could not be reached.)

Nada sometimes felt like a Peeping Tom. Photographs stored in backups of Brero's phone appeared to offer glimpses of his private life: giving flowers to his daughter, doting on a grandchild. Brero, though, clearly had few qualms about invading other people's privacy. In the stolen files, Nada told me, he saw backups of various iPhones and BlackBerry devices, suggesting that Brero had hired hackers himself. There was a surprising amount of confidential banking information, and someone using a Proton Mail address had corresponded with Alp about obtaining details of client accounts at UBS. (Former Alp employees told me that a contact at UBS had sometimes leaked such information to Brero, who courted the source with gifts and meals.)

Nada also saw evidence of honey traps: images of a woman posing in fancy rooms wearing lingerie, and internal correspondence about sending a sex worker to compromise a Swiss tax official. A former Alp employee who wasn't aware of the hacked material told me that Brero, while working for the Swiss art dealer Yves Bouvier, paid a sex worker to entrap a Swiss tax official. (A spokesperson said that Bouvier had no knowledge of such a scheme.) Two former Alp employees each described at least one other occasion when Brero had used the tactic.

When Nada first learned of the hack, "the guys" played coy about who had hired Alp to attack him. They made Nada guess. He named competitors in the oil trade. Wrong, they said. The true client was Sheikh Mohammed bin Zayed, the ruler of the United Arab Emirates.

Sheikh Mohammed, often referred to by the initials M.B.Z., was arguably the richest person in the world, thanks to his control of vast sovereign wealth funds. He commanded the Arab world's most effective military, and paid large sums to lobbyists, think tanks, and former government officials to maximize his influence in the West. And, since the Arab Spring uprisings of 2011, M.B.Z. had led a campaign across the Middle East to restore and fortify authoritarian order in the region. "M.B.Z.'s picture flashed before my eyes," Nada told me. "An oil trader just wants you out of a territory. But this was someone with the resources of a *state*." The threat felt existential. (I sent numerous questions to U.A.E. representatives in Washington and Abu Dhabi who declined to respond.)

The U.A.E. had hired Brero as part of a long-running feud with its neighbor Qatar. As many American officials saw it, the mutual hostility exemplified what Freud called the narcissism of small differences: both states were Western-backed, petroleum-rich monarchies; both had checkered human-rights records; both were close partners with the Pentagon. But the ruling families of Qatar and the U.A.E. embraced different, if equally cynical, strategies for bolstering their power. Qatar performed a balancing act: it hosted a major American airbase but also cultivated a tactical alliance with the Muslim Brotherhood, both to gain grassroots influence in the Arab region and to counterbalance its larger Persian Gulf neighbors. Qatar welcomed exiled Muslim Brothers in Doha and handed them microphones on the government-owned Al Jazeera network (as long as they never discussed Qatari politics). During the Arab Spring, Qatar had used its money and its media to amplify demands for democracy (although never at home), in an ill-fated bet that its Brotherhood allies would assume power around the region.

M.B.Z., meanwhile, staked a claim to regional leadership on the notion that the U.A.E. was a modernizing force in a dangerously backward region. He regarded the Brotherhood—founded on the premise that an Islamic revival and Islamic governance could restore the Arab world's greatness—as an embodiment of that backwardness. That is why the prospect of Arab democracy frightened him, he told Western visitors. He warned that Islamists would win free elections in any Muslim-majority country. "The Middle East is not California," M.B.Z. liked to say. According to a cable obtained by WikiLeaks, he told American diplomats that fifty to eighty per cent of his own military forces would answer the call of "some holy man in Mekkah."

The tensions between the U.A.E. and Qatar ratcheted up in early 2017. Each side splurged on lawyers, lobbyists, and public-relations consultants as they battled for influence in the capitals of the West, and private investigators raced to cash in, too. The industry newsletter Intelligence Online reported that "Saudi Arabia, the United Arab Emirates and Qatar are fast overtaking Russian oligarchs as the main clients of international private investigation firms." Diligence, the company that Brero had tried to outmaneuver in Geneva, secured contracts with Qatar. Brero was evidently recommended to the Emiratis by Roland Jacquard, a Lebanese-born French journalist and an occasional adviser to the French government who professed to be an expert on the secret extremism of European Muslims. The hacked files include what appear to be Jacquard's handwritten notes preparing a campaign against Qatar and French Islamists, and financial records show that Alp paid him a ten-per-cent commission on its Emirati contracts. (Jacquard did not respond to requests for comment.)

In a May 12, 2017, letter to the U.A.E., Brero wrote that "several Head of States" and other "high-net-worth individuals" had made use of Alp's "capacity to enhance or degrade reputations on the Internet." The Emiratis did not need to be sold on the value of online warfare. That month, hackers believed to be working for the U.A.E. took over the Web site of Qatar's state news service and published bogus remarks—falsely attributed to Qatar's emir—describing "tensions" with President Donald Trump, urging conciliation with Iran, praising Hamas, and attesting to warm relations with Israel. The implausible comments appeared calculated to alienate both Washington and the Arab street. News channels controlled by the U.A.E. and its ally Saudi Arabia had wall-to-wall coverage of the purported scandal ready to air, and they kept analyzing its significance even after Qatar denied that the emir had made any such statements.

The U.A.E. soon escalated the fight further, rallying several countries in the region to cut off trade and diplomatic ties with Qatar. The coalition demanded that Qatar neutralize Al Jazeera and reject the Muslim Brotherhood. The Qatar side responded with its own dirty tricks: hackers cracked the e-mail accounts of the Emirati Ambassador to Washington and of Elliot Broidy, a top Republican fund-raiser close to the U.A.E., then leaked embarrassing contents.

In August, 2017, Brero arrived at the Fairmont Hotel in Abu Dhabi, as a guest of its rulers. He had prepared fourteen pages of talking points to persuade the Emiratis to pay him to take on Qatar and its Brotherhood allies. "We would aim to discredit our targets by discreetly and massively diffusing the embarrassing and compromising information: in the eyes of the media/public/officials, they would appear as perverts, corrupts or extremists," Brero wrote in his notes. "The power of 'dark PR' should not be underestimated: many experts argue that Hillary Clinton lost the Presidential elections due to 'fake news' relayed on social media and non-traditional media." Brero's promise: "We would use similar tools against your opponents."

His nominal client was an Emirati enterprise called Ariaf Studies and Research. But Alp's files made it clear that the bills went to M.B.Z. Brero addressed his host as Matar, and photographs that an Alp operative took of him at meetings in Abu Dhabi match one of Matar Humaid al-Neyadi, an Emirati official. Brero later met with Matar at the Baur au Lac Hotel, in Zurich, along with

Matar's superior—referred to in the files as "His Excellency" or "Ali." Someone at Alp took photographs of the superior at that meeting, and they match those of Ali Saeed al-Neyadi, a ministerial-level aide to Sheikh Tahnoun bin Zayed—the Emirati national-security adviser and M.B.Z.'s brother. Brero sent a formal letter thanking "Your Excellency" for "the great honour to provide our services to your country." In texts, he sent "warm greetings" to "His Highness"—M.B.Z.

Brero had planned to tell the Emiratis that, given the profound secrecy of the Muslim Brotherhood, investigating them would be unusually costly. "We need to be frank about this case: to obtain useful, ideally game-changing intelligence, especially evidence-based, our actions remain highly complex, risky and resource-intensive," he wrote, in a WhatsApp message after the Abu Dhabi meeting. Yet this "first collaboration" was "a noble cause," he went on, and "could also allow you to judge our work and effectiveness." Brero's pitch succeeded. In an internal accounting, he recorded that the U.A.E. had agreed to an initial four-to-six-month budget of a million and a half euros "to obtain 'concrete evidence' " about Qatar and the Muslim Brotherhood in Europe.

His talking points never mentioned Hazim Nada. Brero initially proposed targeting people who had already been described as Brotherhood sympathizers. For example, he offered to take down Tariq Ramadan, the Swiss philosopher and the grandson of the movement's founder, by exposing his " 'wild' sexual life, his many young mistresses and lax religious practice." Someone else beat him to it, though. Six months after the Abu Dhabi meeting, French police charged Ramadan with sexual assault, and he has since acknowledged having "submissive-dominant" sex with multiple women, though he has insisted that it was consensual. (In reports to the Emiratis, Brero took credit for anything he could, but not for the takedown of Ramadan.)

The idea of targeting Nada appears to have originated in conversations with Sylvain Besson, the Swiss journalist for *Le Temps* who had previously written about Hazim's father, Youssef. "It is an endless déjà vu," Hazim told me. Besson had spun a whole book, "The Conquest of the West: The Secret Project of the Islamists," out of an unsigned fourteen-page document, from 1982, that had been delivered to Youssef and then discovered years later, during the 2001 raid on his home. Most scholars now consider Besson's book an Islamophobic conspiracy theory, but it continues to influence the right. (Anders Breivik, the Norwegian mass murderer, cited the book extensively.)

Brero included Besson in an early list of potential sources for the U.A.E. project and scheduled several meals with him while pitching the Emiratis. Besson's name is attached to an early draft memo about Nada and to a chart showing Nada and Lord Energy at the center of a sprawling network of supposed Islamists. (Besson acknowledged having spoken to Brero, but said that he could not remember the details of those conversations, and would not disclose his sources. He noted that, while he was reporting his book, Swiss investigators had told him that the fourteen-page document was "hugely significant." But he now considered Youssef Nada to be "essentially peaceful." Besson added, "Maybe I would do it differently now.")

In Brero's first official report to the Emiratis, dated October 6, 2017, he wrote, "Why Hazim Nada?" His answer, which ran for forty-eight pages, was predicated on the presumption that the son was an extension of his father: "Youssef Nada is now an 86-year-old millionaire and it is natural that he hands over the family business to the next generation." After making this leap, Brero constructed a case against Hazim Nada mainly through an analysis of surreptitiously obtained copies of Nada's call history for June, July, and August of 2017. Nada often called his sister, for example; she lived in Qatar, and her husband was a mechanical engineer who happened to be the son of a prominent Muslim preacher revered by the Brotherhood. Nada called childhood friends, some of whom were the offspring of his father's old Brotherhood friends. His father's business partner, also a Brotherhood supporter, had a son, Youssef Himmat, who had worked for Hazim and also led a European network of Muslim youth groups. Nada frequently called an

NICK DOWNES

"It's madness! This is no way to create an N.B.A. power forward!"

Italian Lord Energy employee and friend whose family had converted to Islam; the friend had even posted messages on social media opposing a 2013 Emirati-backed coup in Egypt that had removed a Muslim Brother as President. And so on—page after page of secondhand associations. In reality, Nada told me, the only person on his call history who might actually have been an Islamist was an Algerian parliamentarian and the operator of a language school in Milan. Nada's wife was studying Italian there.

Brero pushed his conceit with confidence, though. "Lord Energy SA appears as a highly important—and deeply discreet—entity within the Global Muslim Brotherhood secret terror system," he wrote to the Emiratis. Nada could hardly believe that the Emiratis were paranoid enough to buy it. "You just put some names of people they hate on a chart and their eyes will start flipping!" he told me.

His experience felt increasingly surreal: he was witnessing his own downfall through the eyes of the man who had caused it. The leaked files revealed that the editor of Africa Intelligence, Philippe Vasset, regularly sought information from Alp operatives, whom he knew on a first-name basis. (Vasset, who declined to discuss his sources, may have learned about the Youssef Nada connection indirectly—possibly from an oil-industry intermediary tipped off by Alp, whose operatives wrote Vasset after he had published to commend his reporting.) And Nada saw that, a week after the first Africa Intelligence item, Brero had drafted a sixteen-page dossier, labelled "Sylvain," that further elaborated Lord Energy's supposed ties to the Brotherhood. When Sylvain Besson published the *Le Temps* article, Brero presented it to the Emiratis as evidence of his own early success in exposing Nada.

Brero appears to have figured out quickly that Lord Energy's critical weakness was its dependence on a steady flow of loans—borrowing to fill a supertanker with oil in Libya, say, then paying off the debt when the ship unloaded in Indonesia. Brero's work with Swiss banks had made clear that their compliance departments worried acutely about reputational risk. In February, 2018, he asked for more money to expand his operation against Nada, and proposed "to alert compliance databases and watchdogs, which are used by banks and multinationals, for example about Lord Energy's real activities and links to terrorism." His "objective," he explained, was to block the company's "bank accounts and business." Nada was beginning to feel that the main reason Brero had destroyed Lord Energy was to demonstrate his effectiveness.

Alp quickly put the Emiratis' money to work. An Alp employee named Raihane Hassaine e-mailed drafts of damning Wikipedia entries. On an invoice dated May 31, 2018, the company paid Nina May, a freelance writer in London, six hundred and twenty-five pounds for five online articles, published under pseudonyms and based on notes supplied by Alp, that attacked Lord Energy for links to terrorism and extremism. (Hassaine did not respond to requests for comment. May told me that she had worked for Alp in the past but had signed a nondisclosure agreement.) May and a fictitious French writer concocted by Alp—"the freelance journalist 'Tanya Klein,' whom we created and who is becoming an expert on the European MB"—also published articles about the youth-group network headed by Youssef Himmat, the Lord Energy employee. The articles described the network as a terrorist-recruiting branch of the Muslim Brotherhood. In reality, the network, the Forum of European Muslim Youth and Student Organizations, was funded by the E.U. It campaigned against anti-semitism, Islamophobia, and other forms of hate speech.

Himmat, who grew up in Switzerland, told me that he considered himself to be a classical liberal. Not only did Alp's online campaign cost him his lucrative job at Lord Energy; it prompted banks to cancel his checking accounts and credit cards, and the rumors still make it difficult for him to find employment, borrow money, or even open an online checking account. "What did we do to deserve this?" he remembered asking himself when Nada relayed his discoveries. "We were caught in the crossfire." (He is no longer president of the Muslim-youth network and now makes a much diminished living trading commodities on his own.)

Alp operatives bragged to the Emiratis that they had successfully thwarted Nada's efforts to correct the disparaging Lord Energy entry on Wikipedia. "We requested the assistance of friendly moderators who countered the repeated attacks," Brero wrote in an "urgent update" to the Emiratis in June, 2018. "The objective remains to paralyze the company." To pressure others to shun Lord Energy, Alp added dubious allegations about the company to the Wikipedia entries for Credit Suisse and for an Algerian oil monopoly. And an operative using the pseudonym Laurent Martin lobbied World-Check about Lord Energy's alleged "terrorism."

Nada could not believe how easy it had been to persuade lenders to shun him. "Just a few blogs and some guy with a fake name and Proton Mail account," he told me.

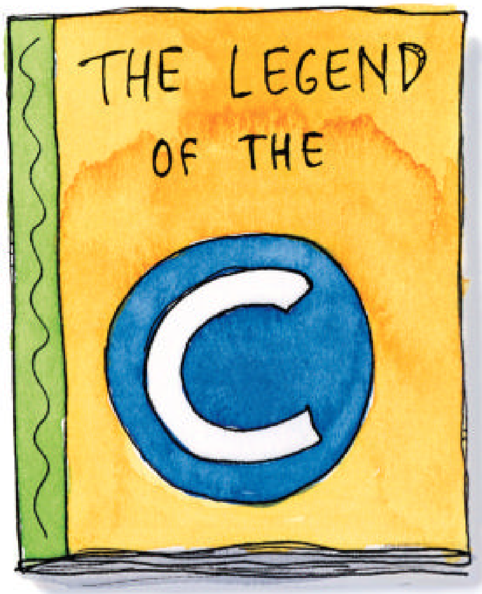
Lord Energy "used to be seen as a serious commodity-trading firm with a legitimate business," Brero wrote to the Emiratis in an update in July, 2018. "Due to our actions, Lord Energy is today publicly exposed as a controversial Muslim Brotherhood company with ties to terrorism financing." He boasted that Google now autocompleted a search for "Lord Energy" with the words "Muslim," "Muslim Brotherhood," or "terrorism." In a 2019 "impact assessment" whose cover bore the image of an arrow hitting a bull's-eye, Brero reiterated his goal: "Pushing the MB-trading company Lord Energy towards bankruptcy."

By then, the U.A.E. was paying Brero two hundred thousand euros a month to locate and attack targets across Europe, with additional fees for one-off side projects. Matar was delighted with Alp's results. "Excellent job," he said in a phone call that Brero secretly recorded. "Everyone appreciates what you have done."

Brero pushed for more. In January, 2020, he wrote to the Emiratis, "We are ready to start the new five year Action Plan, by the end of which we will have covered about 20 European countries." The two had grown so close that in encrypted text messages Matar addressed Brero as "My dear papa." (The hacked files also indicate that Brero set up a Proton Mail address for Matar and then logged in to monitor his client.)

Nada was surprised to see mainstream journalists and scholars on Brero's payroll. While working on behalf of the U.A.E., Brero recorded more than five thousand euros in payments to Ian

SKETCHBOOK BY ROZ CHAST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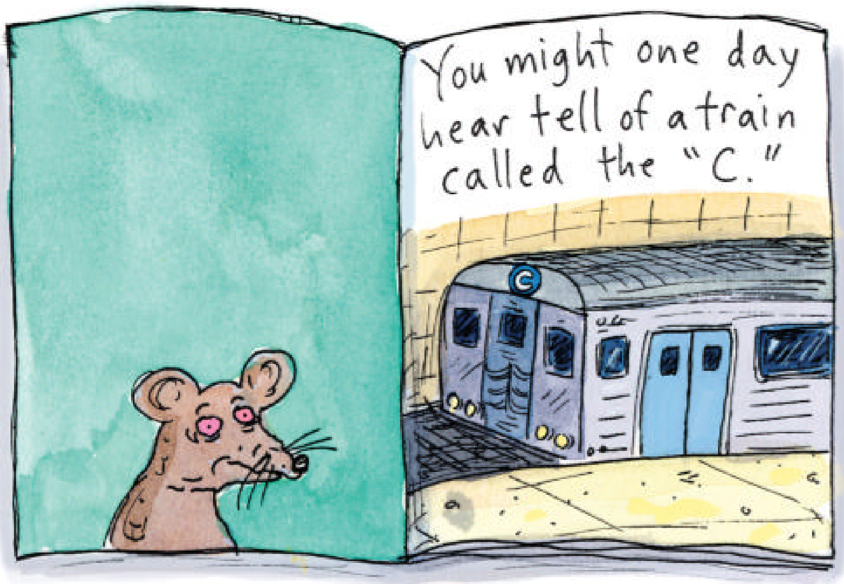
You might one day hear tell of a train called the "C."
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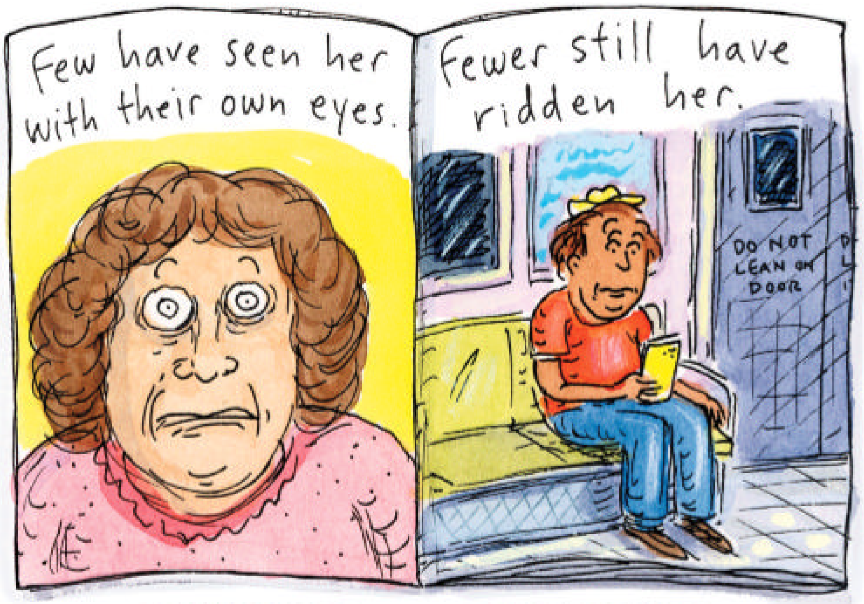
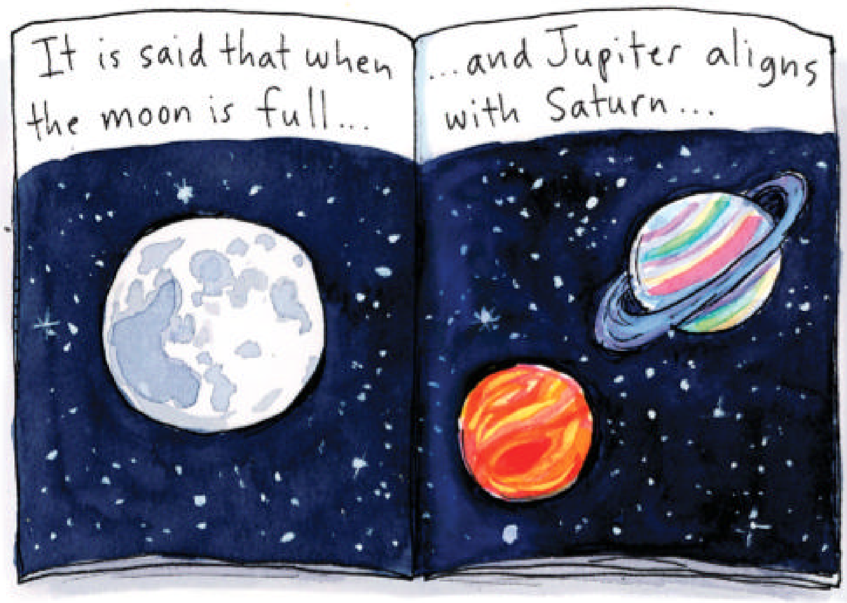
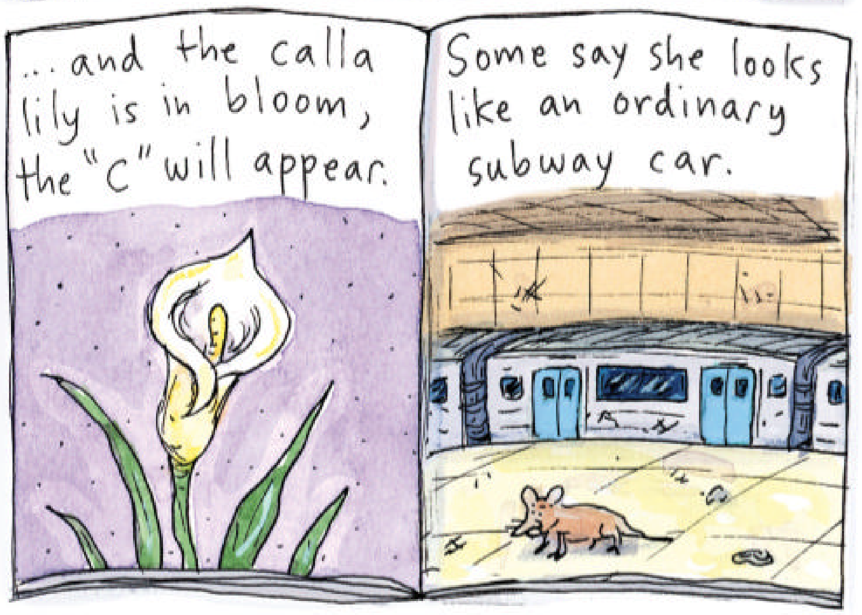
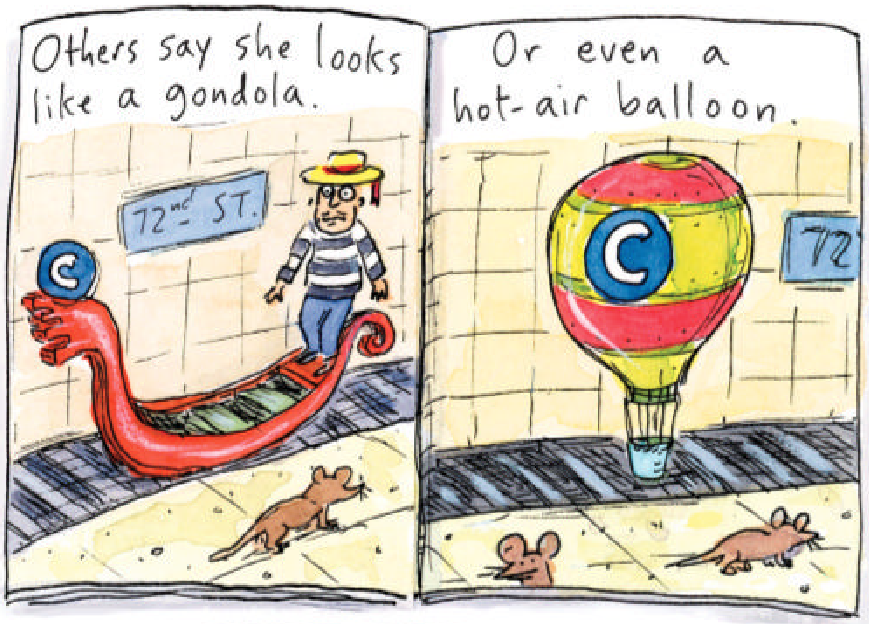

Few have seen her with their own eyes.
Fewer still have ridden her.
DO NOT LEAN ON DOOR


It is said that when the moon is full...
...and Jupiter aligns with Saturn...


...and the calla lily is in bloom, the "C" will appear.
Some say she looks like an ordinary subway car.


Others say she looks like a gondola.
72nd ST.
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Or even a hot-air balloon.
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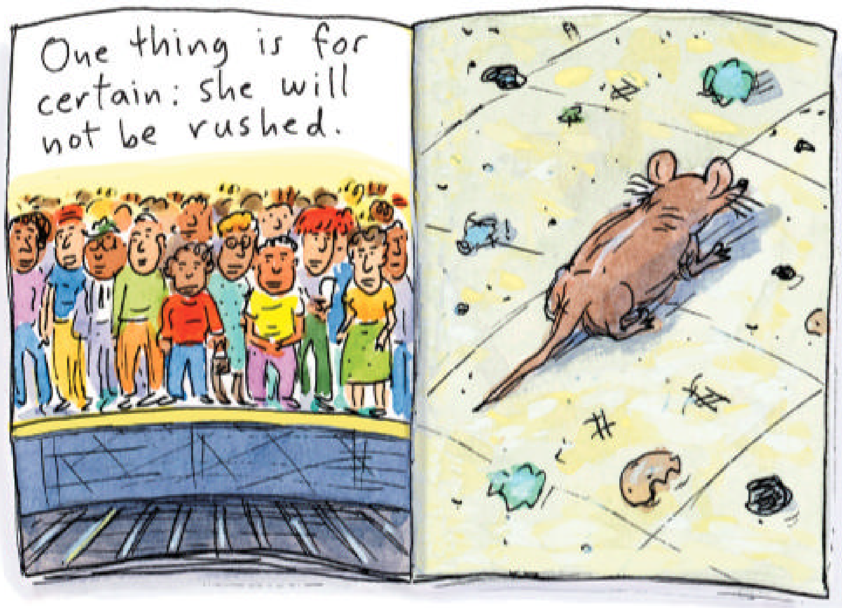
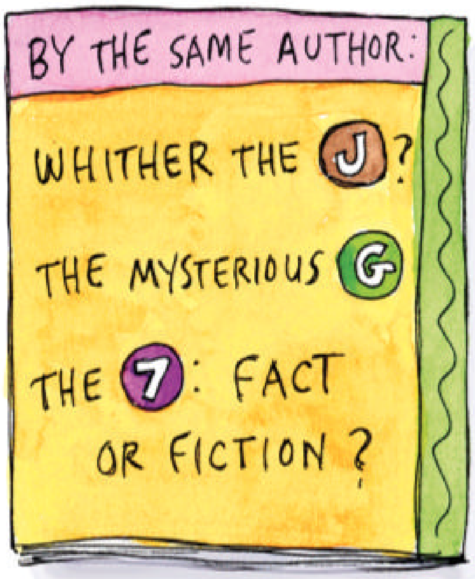

One thing is for certain: she will not be rushed.


BY THE SAME AUTHOR:
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THE 7: FACT OR FICTION?

Hamel, a Geneva correspondent for the French magazine *Le Point*, and another five thousand euros to the French journalist Louis de Raguenel, who wrote for the right-wing magazine *Valeurs Actuelles*. Both men attacked Alp targets in their reports or commentary. (Both men deny receiving payments.)

One of Brero's first moves after signing the U.A.E. as a client was to seek out Lorenzo Vidino, the director of the Program on Extremism at the George Washington University and a consultant for several European governments. Vidino, a dual citizen of Italy and the U.S., argues that even the most moderate Islamist organizations in the West can tilt Muslims toward separatism and violence. Nada, like many Muslims, thought that he simply dressed up bigotry in academic language. Georgetown University's Bridge Initiative, which studies Islamophobia, has described Vidino as someone who "promotes conspiracy theories about the Muslim Brotherhood" and "is connected to numerous anti-Muslim think tanks." In 2020, the Austrian Interior Ministry cited a report by Vidino as a basis for carrying out raids on dozens of citizens or organizations suspected of having links to the Muslim Brotherhood. No one targeted in the raids has been arrested, much less convicted of any wrongdoing. An Austrian appellate court ruled the raids unlawful.

Farid Hafez, an Austrian scholar of Islamophobia who was picked up in the raids and is now a professor at Williams College and a fellow at Georgetown University, said that Vidino portrays nearly all of the most prominent Muslim civil-society organizations as adjuncts of the Brotherhood. "Vidino is like a fox," Hafez said. "He says, 'They have some kind of a relationship to people who are related to the Muslim Brotherhood,' so you cannot sue him for libel, because he does not actually *say* you are a member of the Muslim Brotherhood!"

Alp records show that, on January 12, 2018, Brero treated Vidino to a thousand-dollar dinner at the Beau Rivage Hotel in Geneva. In prepared talking points, Brero indicated that he planned to lie about working for the U.A.E., instead telling Vidino that Alp had been hired by a "London-based law firm" to examine the Muslim Brotherhood in Europe, with a focus on "possibly interesting points, like Lord Energy."

Brero's notes for the dinner suggest that he aimed to make Vidino a proposal: "Would he be available to work as a consultant, perhaps a short unnamed memo on the MB in Europe? (confidential of course)." Two weeks after the dinner, Vidino signed an initial contract paying him three thousand euros for "interesting leads/rumours" about the Muslim Brotherhood, along with a "list of alleged members of the first tier organisations in European countries."

Vidino acknowledged to me that he'd worked for Alp, adding that he often undertook research for private firms. "It's the same research I do no matter what, so it does not really matter who the final client is," he said. "I am a one-trick pony. I have been researching the Muslim Brotherhood in Europe for almost twenty-five years." Given this experience, I said, he must have realized that only the U.A.E. had the means and the motive to pay a private investigator to dig up dirt on Brotherhood-style Islamists across Europe. "They were the most realistic client," he said, though "it wasn't clear cut whether it was the Emiratis, the Saudis, the Israelis, or some private entity in the States."

Vidino delivered to Alp a series of gossipy reports about the Brotherhood's reach, and they undergirded Brero's work for the Emiratis. Vidino even appears to have promised Alp information that he'd obtain while consulting for European security services about Islamist threats. German authorities had invited him to Berlin "to work exactly on our topic," he told an Alp operative in a WhatsApp message in February, 2020, adding, "Obviously I think that my memo would be 'juicier' after that visit." The next month, Vidino wrote that "many of the names on the list come indeed straight from various meetings with German intel." (Vidino told me that he did not remember meeting the Germans around that time but considered such official interactions "field work.")

After ruining Lord Energy, Brero persuaded the Emiratis to pay him to go after many more people on Vidino's roster of suspected Islamists. By November, 2019, Brero had proposed to the Emiratis more than fifty potential European targets. At one point, he asked Vidino for "interesting elements/rumours" on the other side of the Atlantic. "It may be an opportunity to show that we could be useful in this jurisdiction too," Brero suggested. According to the partial records in the hacked files, by April, 2020, Brero had paid Vi-

"I met your daddy on a special island where cameras followed us everywhere and producers tried to instigate fights between us by withholding food and only feeding us alcohol, and when everyone else got voted off we had to choose between getting married or public humiliation."

dino more than thirteen thousand euros. And an internal Alp accounting indicates that, between August 21, 2017, and June 30, 2020, the U.A.E. paid Brero at least 5.7 million euros.

Nada told me that, as he combed through the dossiers on various targets, he began to feel oddly "privileged." Whereas other Alp victims remained in the dark, he had seen the machinations behind his downfall. He recalled, "I was thinking of what I had lived through and multiplying it by all these other people, imagining what every single one of *them* had gone through. I began to feel a kind of responsibility."

The biggest Alp campaign that Vidino inspired was against Islamic Relief Worldwide, a major international charity. It was founded, in 1984, by an Egyptian-born medical student in Birmingham to raise money for a famine in East Africa; another early organizer, Essam el-Haddad, later returned to Egypt and played a prominent role in the Muslim Brotherhood. (Haddad served as the foreign-affairs adviser to Egypt's Islamist President Mohammed Morsi and has been imprisoned since the 2013 military takeover.) But Islamic Relief's purpose was purely humanitarian. Although Israeli officials have claimed that the group's work in Gaza has aided Hamas, Islamic Relief is contesting those charges in an Israeli court, and nobody has ever credibly identified any institutional ties between the charity and an Islamist movement. In fact, Islamic Relief typically works in partnership with the U.N., U.S.A.I.D., and European governments.

The U.A.E. has been more skeptical. In 2014, a year after the coup in Egypt, the Emiratis placed Islamic Relief on a list of dozens of outlawed "terrorist" organizations, along with the Center for American-Islamic Relations, the Muslim American Society, and many other Western civic associations whose founders included Muslim Brothers. (Many nonprofit Muslim groups in the West trace their origins to Brotherhood émigrés, who were often educated professionals with experience in organizing.) The U.A.E.'s condemnation of Islamic Relief was halfhearted, though: representatives of the group were still welcomed at international conferences held in Dubai and Abu Dhabi.

In 2019, Brero pitched a campaign against Islamic Relief by asking the Emiratis, "A major MB charity that has so far managed to remain under the radars in the EU? Hidden links with terrorism?" The Emiratis signed on, and Alp operatives began weaving webs of associations linking Islamic Relief officials to the Muslim Brotherhood or to violent extremists. One seventy-four-page "case study," dated April, 2020, suggested that a member of its board of trustees, Heshmat Khalifa, was "a terrorist at the top of Islamic Relief." Alp's case rested mainly on the claim that, in the nineteen-nineties, Khalifa had worked with an Egyptian humanitarian organization in Bosnia while Islamist extremists were flocking to the war there.

That connection turned out to be too tenuous to sell to mainstream news outlets. But Alp operatives hit pay dirt by combing through Arabic-language posts from Khalifa's personal Facebook account. After a deadly 2014 clash between Israel and Hamas in Gaza, Khalifa had posted antisemitic statements. Among them: "For the first time in modern history, prayer in the Al Aqsa Mosque is banned, and it has been closed by the grandchildren of apes and pigs with the blessing of a pimp in Egypt." (A Quranic verse says that God turned a group of Jews into monkeys or swine as punishment for violating the Sabbath; Egyptian critics of President Abdel Fattah el-Sisi refer to him as a pimp.) In another post, Khalifa called Sisi "the pimp son of the Jews." Alp operatives also dug up similarly offensive social-media posts in Arabic by another trustee and an Islamic Relief executive.

In a report to the Emiratis, Brero wrote that he had leaked the quotes "piece by piece" to journalists—most prominently, Andrew Norfolk, of the London *Times*, an investigative reporter with a history of inflammatory writing about extremism among British Muslims. But Brero explained to the Emiratis that Vidino had served as a cutout: "We channeled our findings to the academic expert Lorenzo Vidino and to the *Times* to be sure to remain completely confidential." (Norfolk told me that Vidino did not disclose that he had received the information from Alp.) Islamic Relief immediately removed all three officials, and said of Khalifa, "We are appalled by the hateful comments he made and unreservedly condemn all forms of discrimination, including anti-Semitism."

Alp operatives promoted the scandal to contacts in the news media across Europe and the United States. The U.S. State Department issued a statement, British and Swedish authorities opened inquiries, and the German government stopped working with the organization. Banks threatened to stop transferring Islamic Relief funds to crisis zones around the world.

Islamic Relief officials told me that though they deplored the antisemitic statements, they couldn't fathom why anyone was digging through six-year-old social-media posts. For about eight weeks, the attacks seemed to be coming from everywhere—the storm felt too diffuse to pin on any single antagonist. The crisis consumed its leadership. Islamic Relief added hundreds of thousands of dollars to its overhead to pay for outside audits, suppress false information in Internet-search results, and restore its good relations with governments—including paying for an independent commission, headed by a former attorney general of England, which verified that the organization was free of institutional antisemitism.

In the end, only the German government cut off the charity. Waseem Ahmad, Islamic Relief Worldwide's chief executive, told me that the main harm done was to the millions of people who rely on the organization for food, shelter, or medical care. "It just hurt and delayed our humanitarian work," he said. Why had the U.A.E. undermined Islamic Relief? "That is a multimillion-dollar question," Ahmad said. "It's a very unjust world—let's put it that way."

In other cases, Alp's campaign for the U.A.E. may have gone beyond spin. The hacked files included more than a dozen photographs of the suburban-Paris apartment of Sihem Souid, a French Tunisian public-relations consultant for Qatar. She had also worked for the French border police and for a socialist minister of justice. She lived in the apartment with her husband and business partner, Olivier Felten, and their two children. Alp had labelled the pictures "reco," for "reconnaissance." In one image, a superimposed red circle marked the "access door" to the apartment; in two others, a red box highlighted a second-floor balcony. Another image was captioned "Picture taken inside her mailbox by our agent."

Souid told me that she'd never heard of Alp or Brero. But by the end of 2017 she had begun to feel that someone was following her: a car appeared repeatedly outside her apartment. And in 2018 a burglar stole some of her jewelry but also her old cell phone, her computer, and some notebooks. A year later, there was a second break-in, by a burglar who took only a laptop and a mobile phone. Souid said, "It is shocking that a foreign country might apply such thuggish methods outside their own borders."

One night in Como in May, 2021, Nada told me, he looked up from his laptop and saw a trespasser outside his window. His house sits more than half a mile from the road, behind a tall gate, so nobody had strayed there by accident. Nada grabbed his crossbow and the trespasser disappeared into the trees. Had an Alp operative cased his house?

Brero's campaign sometimes involved secret retaliation. In a 2018 report, a U.N. panel of human-rights experts concluded that the U.A.E. may have committed war crimes in its military intervention in Yemen. The Emiratis commissioned Brero to investigate the panel's members, especially its chairman, Kamel Jendoubi, a widely admired French Tunisian human-rights advocate. Jendoubi spent seventeen years in exile in France for opposing Tunisia's former dictatorship, then in 2011 helped oversee Tunisia's first free elections. "Today, in both Google French and Google English, the reputation of Kamel Jendoubi is excellent," Brero noted in a November, 2018, pitch to the Emiratis. "On both first pages, there is not a single critical article." Within six months, Brero promised, Jendoubi's image could be "reshaped" with "negative elements." The cost: a hundred and fifty thousand euros.

Rumors spread through Arab news outlets and European Web publications that Jendoubi was a tool of Qatar, a failed businessman, and tied to extremists. A French-language article posted on Medium suggested that he might be "an opportunist disguised as a human-rights hero." An article in English asked, "Is UN-expert Kamel Jendoubi too close to Qatar?" Alp created or altered Wikipedia entries about Jendoubi, in various languages, by citing claims from unreliable, reactionary, or pro-government news outlets in Egypt and Tunisia.

Jendoubi told me that he'd been perplexed by the flurry of slander that followed the war-crimes report. "Wikipedia is a monster!" he told me. He had managed to clean up the French entry, but the English-language page still stymied him. He said, "You speak English—can you help?"

Nada first contacted me in May, 2021, shortly after he reported the hack to Swiss authorities. He felt torn by conflicting desires—he wanted revenge and compensation, and also to expose Brero and the Emiratis. He was outraged that one of Washington's closest Arab allies could spy on and defame Muslim citizens and civic associations in Western democracies. Nada texted me, "What are we, second-class citizens that can be abused like this by some lunatic Muppet in the Gulf?" None of the reports to the Emiratis in the hacked Alp files documented financial transfers or other support being provided to any extremist group or Muslim Brotherhood organization.

Nada initially spoke to me on the condition of confidentiality, without telling the hackers. He didn't yet know if or how he would gain possession of the files, but he wanted to reach out to other targets, who might join him in a legal action. He had reluctantly told the hackers that he would carry a message from them to the richest and most obvious potential buyer for the files: the rulers of Qatar.

After tapping contacts in the petroleum markets and in the Arab news media, Nada reached a series of senior Qatari officials. He was invited to Doha, put up in a luxury hotel, and told to wait. More than a week later, a car shuttled him to a meeting with Qatari intelligence agents, where he shared a PowerPoint presentation on behalf of the hackers: "Over 1.5 millions of files . . . over 1 Terabyte of emails. . . . Complete backups of the executives' phones. . . . Millions of files and information of inestimable value."

Nada received no response. Other Qataris met him at hotels in London. Some, noting that the isolation campaign against Qatar had recently ended, insisted that the feud with the U.A.E. was behind them; others claimed to possess far better intelligence already. A member of the Qatari royal family expressed interest, then backed away. When someone claiming to be a Qatari emissary tried to renew contact, early this year, Nada was too exasperated to engage.

He grew increasingly resentful of the hackers, too. They went silent for weeks at a time, or hinted that they were negotiating with other potential customers. A few leaked Alp documents surfaced in the European media, possibly provided by the hackers. "They are trying to use me, absolutely," Nada told me. "What is their agenda? I don't know."

Last summer, another friend from the oil business gave him the number of a former Emirati security official, Abdul Rehman al-Blouki, who was said to be close to M.B.Z. Hoping for a financial settlement in exchange for staying quiet, Nada spoke with Blouki on the phone. Do not threaten the U.A.E., Blouki warned. (Blouki told me he didn't remember the call, but said that the U.A.E. "is always a fair country, whose rulers only give and don't take.")

I sensed that Nada's drive for vengeance might be fading. He told me that he is still worth about twenty million dollars. Lord Energy's collapse had freed him to start the electric-car venture he had dreamed of. In November, his new company, Aehra, unveiled its first model, a sleek S.U.V., and *Motor-Trend* praised its "Milanese flair." Meanwhile, he accepted a research position in plasma physics, beginning next year, at Imperial College London. He and his wife are preparing to divorce, and he is now involved with a woman from Ukraine; he has travelled with her several times to her home town, near the front line of the war. "I am moving on with my life," Nada told me.

Nevertheless, his improbable glimpse inside Alp's campaign haunted him. How many other private citizens had been targeted by such firms—and never even known it? Occasionally, the press learned of another instance in which non-Western governments or billionaires had deployed private intelligence agents: last fall, the New York *Times* reported that both Iran and China had used undercover agents to hire American private intelligence firms to plot against dissidents in New York and New Jersey. A country's decision to outsource intelligence operations to a Western company may seem perplexing, but the strategy offers various advantages. A country that is courting Western approval, such as Kazakhstan, might want to avoid getting caught at conventional spying. Others, such as the Persian Gulf monarchies, lack effective in-house intelligence agencies. Western firms, meanwhile, often have connections to local media outlets which make them ideal proxies for conducting "dark P.R." Pierre Gastineau, the editor of Intelligence Online, noted that few private investigators have faced a penalty for working for a foreign plutocrat or government. "There is no cop in the yard," he told me.

Words that dogs don't need to know
Monopoly
Sauté
Obtuse
Cryptocurrency
DONNELLY

Ronald Deibert, a political scientist at the University of Toronto and the director of its Citizen Lab research center, has argued that the growing use of private intelligence agencies by authoritarian rulers and their cronies is ushering in "a golden age of subversion." Last year, in an article for the *Journal of Democracy*, he wrote that, "even a few decades ago, most authoritarian regimes" lacked the capacity to "mount the types of foreign-influence, espionage, and subversion operations that have become common today." But digital spying does not require people to be on the ground in a foreign country, and the growing number of private firms—often staffed by former Western intelligence agents—makes it easy for governments or oligarchs to order an espionage or misinformation operation à la carte. "Anyone with enough cash can hire a 'private Mossad,'" he wrote. "Subversion is now big business. As it spreads, so too do the authoritarian practices and the culture of impunity that go with it."

Nada suspected that he had not yet escaped Brero's sights. The most recent of the hacked files date from early 2021, and that fall a Reuters reporter forwarded Nada a pseudonymous e-mail, from Brero's firm, that repeated claims about his secret ties to extremism. This time, Alp was attacking the Italian military for training at Nada's indoor-skydiving business. (After I visited Brero's offices, I received a similar e-mail.)

Nada told me, "This stuff should not be allowed to happen—that some dictator or his consultants decide for their own reasons to target citizens of a democracy and ruin their lives, without any kind of process whatsoever." Many of Brero's targets "have never done anything wrong, other than potentially holding views that the Emiratis saw as a threat. It was clear that I had no political views at all!" Of course, there is also the money Nada lost—more than a hundred million dollars by early 2019, he said, not to mention the millions he might have earned during the boom years for the oil trade in 2020 and 2021.

The lyrics of a Smashing Pumpkins song ran through his head: "The world is a vampire sent to drain / Secret destroyers hold you up to the flames / And what do I get for my pain?"

By last spring, the hackers had cut off Nada's access to the Alp files. He told me this past winter that he had persuaded "the guys" to stop holding out for a big payday from Qatar. Instead, he proposed that public exposure of some of the stolen information might help them attract other customers. The hackers e-mailed the Emirati-related Alp files to a Swiss prosecutor in Geneva, Yves Bertossa, and to Dick Marty, the former prosecutor—who forwarded them to Nada. (Bertossa declined to comment; Marty confirmed that he had relayed the unsolicited e-mail to Nada.)

Nada has now sent the files to two lawyers, one in Geneva and the other in London. Both declined to comment. It is a violation of Swiss law to gather political or business intelligence for a foreign state, and someone convicted of the crime can be sentenced to three years in prison. British law allows sweeping claims of damages for defamation. Nada told me that he is talking to lawyers in the U.S. about enlisting other Brero targets in a class-action suit to be filed there. "They've messed with the wrong guy this time," he told me.

Nada can expect a vigorous counterattack. Among the hacked files was a recording of a phone call with Matar about how to handle an e-mail from Nada threatening legal action. Ignore it, Matar told Brero. The U.A.E. was ready for war. "We're fully, fully a hundred per cent behind you," Matar said. "Whatever it takes." ♦

PROFILES

CROSSOVER ARTIST

A neuroscientist and musician unites his two passions.

BY BURKHARD BILGER

Luk Kop didn't seem to have the makings of a musical prodigy. He didn't hum made-up tunes to himself as a youngster or shake his head when someone sang flat. He didn't build instruments out of sticks and gourds or blow trumpet solos as a five-year-old. He had a brief moment of fame as a child actor, in the Disney film "Operation Dumbo Drop," but grew into a sullen and ungainly teen. When the composer and instrumentalist Dave Soldier first met him, in Thailand, in 2000, Luk Kop spent most of his time eating grass and hanging around with the other elephants. He'd been deemed too truculent to mix with tourists.

Soldier was in Thailand to recruit musicians for an elephant orchestra. He had hit upon the idea with Richard Lair, a conservationist and adviser at the Thai Elephant Conservation Center, where Luk Kop lived. In the spring of 1999, when Lair was on a research trip in New York, he and Soldier stayed up late one night at Soldier's place in Chinatown, talking about elephant art. The Russian artists Vitaly Komar and Alexander Melamid had recently taught some of the sanctuary's animals to paint with oils by holding brushes in their trunks. The results were exhibited at the Museum of Contemporary Art Australia and auctioned off at Christie's for more than thirty thousand dollars. One critic compared them to Abstract Expressionism. But bright colors on a canvas are easy to like; music is a harder sell. To anyone other than a parent, a grade-school orchestra sounds like a crate of instruments falling down a staircase. Why would elephants be any better?

Asian elephants have been trained by humans for more than four thousand years. They've learned to pull plows, carry tree trunks, clear paths, and trample armies. Some female elephants are both so intelligent and so even-tempered that villagers in Thailand have used them as babysitters. Still, the orchestra was a stretch. Studies had found that elephants could identify simple melodies and distinguish pitches as little as a half step apart. But that didn't mean they would make good musicians—at least of the sort that play in an orchestra. When Soldier explained his plan to the elephant trainers at the sanctuary, they reacted with "slightly irritated bemusement," he later recalled.

The first challenge was making instruments. Anything an elephant played had to be weatherproof and extremely durable. It had to be operable without hands or fingers, and it had to be very large. Working with Lair and the carpenters at the sanctuary, Soldier built an elephant-size xylophone, a drum, and a single-stringed instrument that looked like a washtub bass. The blade of a huge circular saw that was abandoned by a tree poacher in the forest was turned into a gong. Initially, Soldier had all the instruments tuned to a C-sharp pentatonic scale, so they would sound good together. Then he mixed in more instruments and tunings. A metalworker in nearby Lampang built some marimbas and thunder sheets; a Canadian artist designed a synthesizer that the elephants could play with their trunks; and Soldier brought in bells, harmonicas, and mouth organs from northeastern Thailand. Within four years, sixteen elephants were playing a full orchestra's worth of instruments.

Luk Kop had never touched a drum in his life. And yet, when Soldier set one before him and handed him a stick, he grabbed it with his trunk and quickly learned how to wield it. Elephants tend to keep a steadier beat than humans do, a study by the neuroscientist Aniruddh Patel later found, and Luk Kop's sense of timing was uncanny. Soldier rewarded the elephants with apples and bananas, or petted their fat pink tongues, which some elephants love. But Luk Kop didn't need much encouragement. Soon enough, he was improvising drum solos like a giant Ginger Baker. "He was particularly talented," Soldier told me.

After that first trip to Thailand, Soldier played some recordings of the elephants for a music critic at the *Times*. He didn't mention who the musicians were. The critic listened intently for a while, then ventured that the group must be Asian. He could tell from the repertoire, he said, though he couldn't identify the players. Soldier must have been delighted by that, but he insists that he wasn't trying to catch the man out. He was just posing a question, in the most direct way possible, that had preoccupied him most of his life: What makes music music?

Soldier is of two minds. As a composer and violinist, he doesn't like to define music too strictly. He prefers to mix genres, blur categories, erase the boundaries between rock and classical, melody and noise, animal and human. "Humpbacks are down at the bottom of the ocean singing every day," he says. "Is that any different from you practicing the fiddle or guitar at home?" Soldier will be sixty-seven in November and has been a fixture of New York's downtown music scene since the early eighties. He has composed string arrangements for David Byrne and John Cale, operas with Kurt Vonnegut, and cartoon scores for "Sesame Street." To Soldier, it's all of a piece. Once, in the same week, he played a gig with Pete Seeger and opened for Ornette Coleman. "It was like talking to the same person," he told me.

But music is just Soldier's night job—the thing he does when he's not at the office. By day, he has another name and identity: David Sulzer, professor of psychiatry, neurology, and pharmacology at Columbia University. Sulzer specializes in autism and Parkinson's disease,

After keeping his careers separate for years, David Sulzer is using science to expand our idea of what music can be.

ILLUSTRATION BY JÉRÔME BERTHIER

and has done research on Alzheimer's with his wife, Francesca Bartolini, an associate professor of cell biology at Columbia. For years, Sulzer was careful to keep his two careers separate—his music was rarely about science, and his science touched only glancingly on music—and they came to draw on opposite sides of his personality. David Sulzer is a reductionist, trying to pinpoint the brain's essential mechanisms. Dave Soldier is an iconoclast, trying to expand our idea of what music can be. It's only relatively recently that the two have begun to work together—to see what science can say about music and vice versa.

"When someone asks what my real focus is, I say it's the basal ganglia," Sulzer told me one afternoon. "That's where the sensory information from touch, hearing, and vision all converge." We were standing in his lab overlooking the Hudson, at Riverside Drive and 168th Street, staring at a plastic brain. Sulzer had taken it off the windowsill to show me, but the model fell to pieces in his hands. "If you were one of my students, I'd have you put it back together," he said. In early photographs, Sulzer can look dauntingly cerebral, with his lean, ascetic frame, pale bald head, and heavy-lidded eyes. But his lines have softened with age; his manner has grown puckish and approachable. He was wearing a rumpled shirt and wash-worn slacks that day, and spoke in a low, deliberate voice as we walked through the lab—the steady bass beneath his sometimes bewildering talk. We passed racks of chemicals and banks of multiphoton microscopes, grad students hunched over electrophysiology data, and a break room with an atlas of the rat brain perched on top of the refrigerator. Sulzer mentioned punk rock and synaptic pruning, dopamine and country blues. "We tried to play whale songs for elephants once," he said. "But the technology was too poor. Elephants really don't like wearing headphones."

When Bartolini first met Sulzer, at a club on the Lower East Side, in 2006, she found him a little arrogant. "I mean, nobody has normal conversations like that," she told me. Sulzer was playing with his flamenco fusion band, the Spinozas, and Bartolini was in the audience. She was sure that she recognized him from somewhere, but, when she went up to him after the show, he said that he'd never seen her before. It turned out that they shared the same morning commute, on the train from lower Manhattan to Columbia. They even worked in the same building. "I guess I wasn't very memorable," she says, laughing. It's hard to imagine: Bartolini, who was born and raised in Rome, was already an accomplished cell biologist, with the sharp wit and flashing eyes of a Fellini actress. But she had misjudged him as well. What she took for haughtiness was poor eyesight. What seemed like pretension was just a mind delighting in its own connections.

Those connections are often made in the basal ganglia, a snail-shaped neuronal structure perched on the brain stem like the ball end of a stick shift. You have to cut through the skull and the cerebral cortex to reach it, so it's hard to study, but it helps coördinate some of our most complex behaviors—music-making among them. Neuroscientists know a few of the paths that a song takes through the brain: the motor cortex directs the fingers on the piano keys; the primary auditory cortex registers the sound they make; the locus coeruleus releases norepinephrine, connecting the sound to emotion. But even the plainest tune sends signals cascading through other areas, triggering memories, analysis, and all the senses. The language of neuroscience itself is rooted in music. The word "synapse" comes from the Greek *synaphe:* the note that connects one octave to the next, as you go up a scale—the note "that brings us back to do," as Julie Andrews sang.

"Music is so ingrained in us it's almost more primitive than language," Sulzer told me. An old man with Alzheimer's might hear a Tin Pan Alley tune and suddenly recall his daughter's name. A young woman with Parkinson's will stand frozen on a stair, unable to move her legs, but if she hums a rhythm to herself her foot will take a step. "I know of one man who had a stroke so severe that he could barely talk," Sulzer said. "But he could still sing." Music is a kind of skeleton key, opening countless doorways in the mind.

The first song that lodged in Sulzer's mind and wouldn't leave was from Gershwin's "Porgy and Bess": "Clara, Clara, Don't You Be Downhearted." He was seven years old, sitting in his family's living room in Carbondale, Illinois, and couldn't shake the sound of those lush, insistent voices—the way they lapped against one another in mournful waves. He took a few piano and viola lessons as a boy, but it wasn't until he picked up the violin, at thirteen, that he found his instrument. Bluegrass was his first love, along with the hillbilly jazz of Vassar Clements. He learned country tunes from the bands that passed through town on the Grand Ole Opry tour, and old blues from the used 78s that he bought for a quarter—Howlin' Wolf, Little Walter. He played in the high-school orchestra, learned to play guitar, and joined a folk-rock band. In his senior year, the band opened for Muddy Waters.

It was the beginning of his double life. Music was his obsession, but science was his birthright: his parents were both eminent psychologists. His father, Edward Sulzer, had been a child prodigy, admitted to the University of Chicago at fourteen. He dropped out two years later when his mother died unexpectedly, studied film production at City College in New York, and found a job on Sid Caesar's "Show of Shows." The best directors had to be good psychologists, he decided. So he enrolled in a Ph.D. program in psychology at Columbia. His wife, Beth Sulzer-Azaroff, was studying education at City College when they met. While he went to grad school, she taught elementary school in Spanish Harlem and gave birth to their three children. Then she, too, earned a doctorate in psychology. They both became professors at Southern Illinois University.

The Sulzers were revolutionaries in establishment dress. Disciples of the psychologist B. F. Skinner, they believed that almost any behavior could be learned or unlearned through stepwise training. Sulzer's father went even further—he was a "radical egalitarian," his son says, convinced that conditions like schizophrenia were largely social constructs. As the psychiatrist Thomas Szasz put it, in "The Myth of Mental Illness": "If you talk to God, you are praying. If God talks to you, you have schizophrenia." Sulzer's father knew Timothy Leary and was an early user of LSD. He did much of his research in penitentiaries, learning how to rehabilitate people in prison by offering them rewards for small changes in behavior. Sulzer's mother helped pioneer the use of behaviorist techniques to teach severely autistic children. The medical establishment considered her patients incapable of the simplest tasks—even dressing themselves or brushing their teeth. "But she got them there, step by step," Sulzer says.

Sulzer's double identity seems modelled on his parents—one part establishment figure, one part revolutionary—but it's more compartmentalized. His scientific career followed a fairly straight path at first. After high school, he majored in horticulture at Michigan State University and earned a master's in plant biology at the University of Florida. He gathered wild blueberries in the Everglades and crossed them with domesticated plants to breed varieties that could be farmed in Florida. He told himself that he would be the first person to use recombinant DNA in plants. Then, one summer, he went to hear a lecture by William S. Burroughs, the writer and former heroin junkie. Burroughs foresaw a time when synthetic opioids would be so powerful that they would be addictive after just one or two uses. Sulzer couldn't get the idea out of his head. Like the issues that preoccupied his parents, addiction was a behavioral problem rooted in the mind's inner workings. It connected science to society, and society, through some of the musicians that Sulzer had known, to art. When he began his Ph.D. program at Columbia, in 1982, he had a fellowship in biology. But his focus quickly shifted from plants to the brain.

His musical career was even more unpredictable. As a college student, he took composition lessons with Roscoe Mitchell, of the Art Ensemble of Chicago, and played in honky-tonk and blues bands. In Florida, he played rhythm guitar with Bo Diddley and joined a bluegrass group that opened for auctioneers. When he first moved to New York, in 1981, he had yet to be accepted at Columbia. So he found a room for a hundred dollars a month in Red Hook, Brooklyn, and joined any band that would have him. In the first year and a half alone, he performed with roughly a hundred groups. He wore cowboy boots and leather vests to the country shows, black jeans and T-shirts to the avant-garde performances, a tuxedo to the lounge acts and Mafia parties. "It was a point of pride that you never turned down a gig," he told me.

Sulzer sometimes wrote out parts and simple scores when he performed with jazz and classical groups, and he went on to compose pieces of his own. In 1984, he founded the Soldier String Quartet to play them. To shore up his technique, he took night classes at Juilliard with the composer Jeff Langley. It was a humbling experience. "Someone in the next room would be playing a Tchaikovsky concerto better than I could if I'd practiced for twenty years," he told me. "And I'd open the door and the kid inside would be nine years old."

Sulzer's strengths lay elsewhere. His quartet had the usual violins, viola, and cello, but they could be joined by bass, drums, and singers, depending on the piece. He wanted them to be able to play anything from Brahms to Earth, Wind & Fire. "Like the more famous Kronos Quartet, the Soldier navigates waters outside the chamber music mainstream," the *Times* critic Allan Kozinn wrote in 1989. "But the Kronos's unpolished performances leave one suspecting that it adopted its repertory to avoid comparison with better quartets. The Soldier seems to be the real thing—a virtuosic band given to iconoclastic experimentation."

The records Sulzer made never sold many copies. Yet they represent a kind of shadow history of New York's underground rock and classical scenes. He seems to crop up in every era in the company of the city's most daring musicians: Lou Reed, Steve Reich, Richard Hell, La Monte Young, Henry Threadgill. Still, he had little interest in being a full-time musician. "I just looked at all the guys between forty and sixty, and I didn't know a single one who had a stable home life," he told me. "Not even one. They were on tour all the time. Every marriage was broken up. Everyone had kids

"I don't have to look at my watch to know it's just past noon."

"Painting was her love, but framing was her passion."

• •

they didn't know. And touring can just get really boring. Sitting around the concert hall for five hours after the sound check. Playing the same hits every night. Spending all your time with the guys you just had breakfast with. Even if you like them, you end up hating them."

On weekday mornings, sour-mouthed and stale with smoke from another late-night gig, he would throw on his grad-school grunge and head north to Columbia to do lab work. He knew better than to mix his two careers: neither his uptown nor his downtown peers had any patience for dilettantes, much less crossover artists. "You could either do minimalism or serial academic stuff," he says of the classical-music community in those days. "I did neither one, so I got harassed a lot. I was in a no man's land. Now that no man's land is called 'new music.'" The scientific community was even more single-minded. When Sulzer was working on his doctorate, his adviser forbade him to play gigs. That's when Dave Soldier was born. "He wasn't fooled," Sulzer told me. "We were in the office one time when the phone rang, and it was Laurie Anderson's office asking for me. He was, like, 'Dave, you fucking asshole, you're still making music.'"

Early one evening last year, in a building on West 125th Street, a man sat in a chair with electrodes bound to his forehead. The electrodes were wired to a laptop, on which Sulzer and Brad Garton, the former director of Columbia's Computer Music Center, were monitoring the man's brain waves. His name was Pedro Cortes. Heavyset and fierce-looking, with a jet-black mane and deeply etched features, Cortes is a virtuoso guitarist and godfather of the flamenco community in New York. As the computer registered the voltage changes in his brain, he chopped at his guitar in staccato bursts, like the hammer strokes his grandfather once made as a blacksmith in Cádiz. Beside him, his friend Juan Pedro Relenque-Jiménez launched into a keening lament, but Cortes abruptly stopped playing.

"It's kind of out there," Cortes said, glancing at the lines zigzagging across the screen. "But it's kind of awesome." Sulzer grinned up at him from the laptop. "The skull is like an electrical resistor wrapped around the brain," he said. Cortes was the guest speaker that night for Sulzer's class on the physics and neuroscience of music. The students met every week here in Columbia's Prentis Hall, a former milk-bottling plant that was later home to some of the earliest experiments in computer sound. (One of the world's first synthesizers sat in a room down the hall, a sombre hulk of switches and V.U. meters, silent but still operational.) Sulzer's class was based on his book, "Music, Math, and Mind," published in 2021. He wrote most of it on the subway, on his morning and evening commute, and filled it with everything from the physics of police sirens to the waggle dances of bees. It was both a straightforward textbook and a catalogue of musical wonders—Sulzer's first attempt to commit his strange career to paper.

Cortes was here as a musician and a study subject. He had told the class about the origins of flamenco in fifteenth-century Spain. He had demonstrated the music's complex rhythms and modal harmonies. Now we were hearing how playing it affected his brain. The Brainwave Music Project, as Sulzer and Garton called this experiment, was an attempt to have it both ways—to join music to analysis in a single, seamless loop. First, the electrodes recorded the activity in Cortes's brain as he played. Then a program on the laptop converted the brain waves back into music—turning each element of the signal into a different rhythm or sound. Then Cortes accompanied the laptop on his instrument, like a jazz guitarist trading fours with a saxophone player. He was improvising with his own brain waves.

The music coming from the laptop was nothing like his guitar work. It was thin and herky-jerky and oddly ersatz, like something you'd hear at a dive bar in a "Star Wars" movie. But playing along with it was a good deal more pleasant, for Cortes, than earlier experiments of this kind. Human brain waves were first recorded by the German psychiatrist Hans Berger in 1924. Berger sometimes used his children as research subjects. He knew that the brain generates bioelectricity, so he placed electrodes on their scalps and amplified the signal enough for a machine to draw a line across a piece of paper. When he had wired up his daughter Ilse, he asked her to multiply 5⅕ by 3⅓ in her head. Stroke by stroke, a jagged pattern appeared on the page: beta waves, we now call them. When Berger's subjects were sleeping—still with electrodes on their scalps—their brains often generated longer, more slowly oscillating signals: delta waves.

Brain waves tend to reflect your state of mind. The higher their frequency—from drowsy deltas to jittery gammas that oscillate up to a hundred times as fast—the more alert and focussed your thoughts usually are. But brain waves measure only the electrical fields on the brain's surface. They say nothing about the myriad signals coursing underneath. (The auditory nerve alone has thirty thousand axons on each of its two branches, Sulzer points out, all of which carry their own electrical charge.) In the nineteen-thirties, a neurosurgeon in Montreal named Wilder Penfield began to probe those subcurrents. He suspected that epileptic seizures were caused by rogue electrical surges in the brain, so he used electrodes to locate their origin on a patient's head. Then he carved out a piece of the skull in that spot—the patient was wide awake during the procedure—and stimulated the exposed brain. When he'd zeroed in on the source of the seizures, he could remove the malfunctioning tissue and prevent the problem from recurring. That method is still used.

Penfield and others went on to map the whole surface of the brain's motor cortex. They found that, depending on which spot they stimulated, a patient's upper lip might contract, the left eyelid would blink, the right index finger would curl, and so on. The same was true of the auditory cortex, situated on the temporal lobes above each ear. By stimulating an area called the lateral sulcus, Penfield could make patients think that they'd heard a sound—a knock or a buzz or a clear tone. Nima Mesgarani, a neuroengineer at Columbia, and others have since shown that certain neurons in the cortex respond to specific consonants and syllables in our speech. By seeing which neurons are activated, you can reconstruct the sentence that a subject just heard. You can even predict which note someone is about to hear in a song: the brain can tell where the melody is going, so it seems to activate neurons in anticipation.

Yet music's path through the brain is never straightforward. It's less like sound travelling over a speaker wire than like data flowing across the Internet—every phrase, every rhythm and pitch, is subdivided, distributed, and reassembled over an infinitely complex network. It's hard to even isolate the signal. When the synthesizer down the hall was first invented, Sulzer told his class, the sounds it produced were too mathematically perfect to be musical. "A pure sine wave is just so damn boring," he said. "They had to build circuits to dirty it up." A modicum of noise is essential to any instrument's sound, it turns out. Reeds rasp, bows grind, voices growl, and strings shimmer with overtones. In West Africa, musicians attach gourds to their xylophones and harps to rattle along as they play. Music, like most beautiful things, is most seductive when impure.

The line between signal and noise has only become blurrier over the years. "Music is undergoing the same kind of growth as neurology," Sulzer told the *Times* in 1999, two years before the first iPod was released. "We listen to so many kinds of music now, from medieval music to music from Asia, Africa, South America, and all over the world. We can use any sound, any rhythm, any kind of polyphony or phrasing." Since then, streaming services and home studios have sent music sprawling so far outside its old categories that it has spun back around to fundamental questions: What is a song? What distinguishes it from other kinds of sounds?

Neuroscience hasn't been much help. For all the multiphoton microscopes in his lab, Sulzer can still seem like Galileo, trying to infer the positions of planets from pinpricks of light in ground glass. "We know a lot about audition, and the pathway from the ear to the midbrain to the thalamus and cortex," he told me. "But what gives meaning to sound? That has been pretty impenetrable." The brain processes sound in the auditory striatum, where signals from the auditory cortex and auditory thalamus converge with dopamine. But only recently have neuroscientists learned how to identify the exact neurons involved. Adrien Stanley, a neuroscientist in Sulzer's lab, is using a technique called fibre photometry to trace the process in mice. His animals are bred to have a special protein in their auditory striatum that fluoresces when certain neurons are activated. Stanley trains the mice to associate particular sounds with safety or danger. (A safe sound means nothing will happen; a dangerous sound means the mouse will get a mild electric shock.) Then he sees which neurons fluoresce as the mouse reacts. How does behavior follow from sound, and where is that connection processed? "That's auditory learning," Sulzer says. "And auditory learning is music to me."

The ability to process sound sometimes breaks down in people with Parkinson's and Alzheimer's, Sulzer says. That may be why music has such a dramatic effect on them: only a very strong signal—a beloved tune or a rhythm that they hum to themselves—can bridge the gaps in their neural circuitry. But processing sound is just a start. To make meaning out of music, the brain has to make connections that Sulzer still can't trace in his lab at Columbia. He has to look to other scientific fields. When he flew to Thailand to start the elephant orchestra, in 2000, he went as Dave Soldier, musician. Since then, his work with animals has been done mostly as David Sulzer, collaborating with experts on birds and apes.

Animals inhabit a sonic world separate from ours. Their voices and hearing are tuned to different sounds and frequencies. (The human voice ranges from a rumbling low of about eighty hertz to an ear-splitting high of three thousand; an elephant can go four octaves lower, a bat more than five octaves higher.) Yet animals and humans tend to process sound in much the same way. "The circuitry is similar in anything with a cortex," Sulzer says. When Nima Mesgarani recorded the brain activity of ferrets, he found that certain sounds trigger their neurons just as they do ours. "Ferrets can hear human speech and pull it apart into phonemes," Sulzer says. "Which is just nuts." Some species are extraordinary mimics. An Asian elephant named Koshik, in a zoo in South Korea, could utter five words of Korean by sticking his trunk in his mouth. A beluga whale named Noc, captured by Inuit hunters and cared for by the U.S. Navy, learned to mimic the voices that he heard around his tank. One day, he chortled "Out!" so convincingly, by forcing his voice through his nasal tract, that a diver left the water. He thought he'd heard his supervisor.

When Sulzer first began working with elephants, he noticed that their trainers used the same techniques that his mother used with children. Like them, the elephants quickly outstripped their instruction. "We are proud when our dogs can understand five or six commands," Sulzer told an interviewer a few years ago. But, to the villagers in Thailand, elephants seemed nearly as responsive as four-year-old children. They couldn't understand as many words, but could carry out equally complicated verbal instructions—"Take all these logs and arrange them in a pyramid-shaped pile," for instance. More than that, Sulzer found, the elephants were instinctive musicians, with a sense of timing and tone so deep and clear that it seemed intrinsic to their biology.

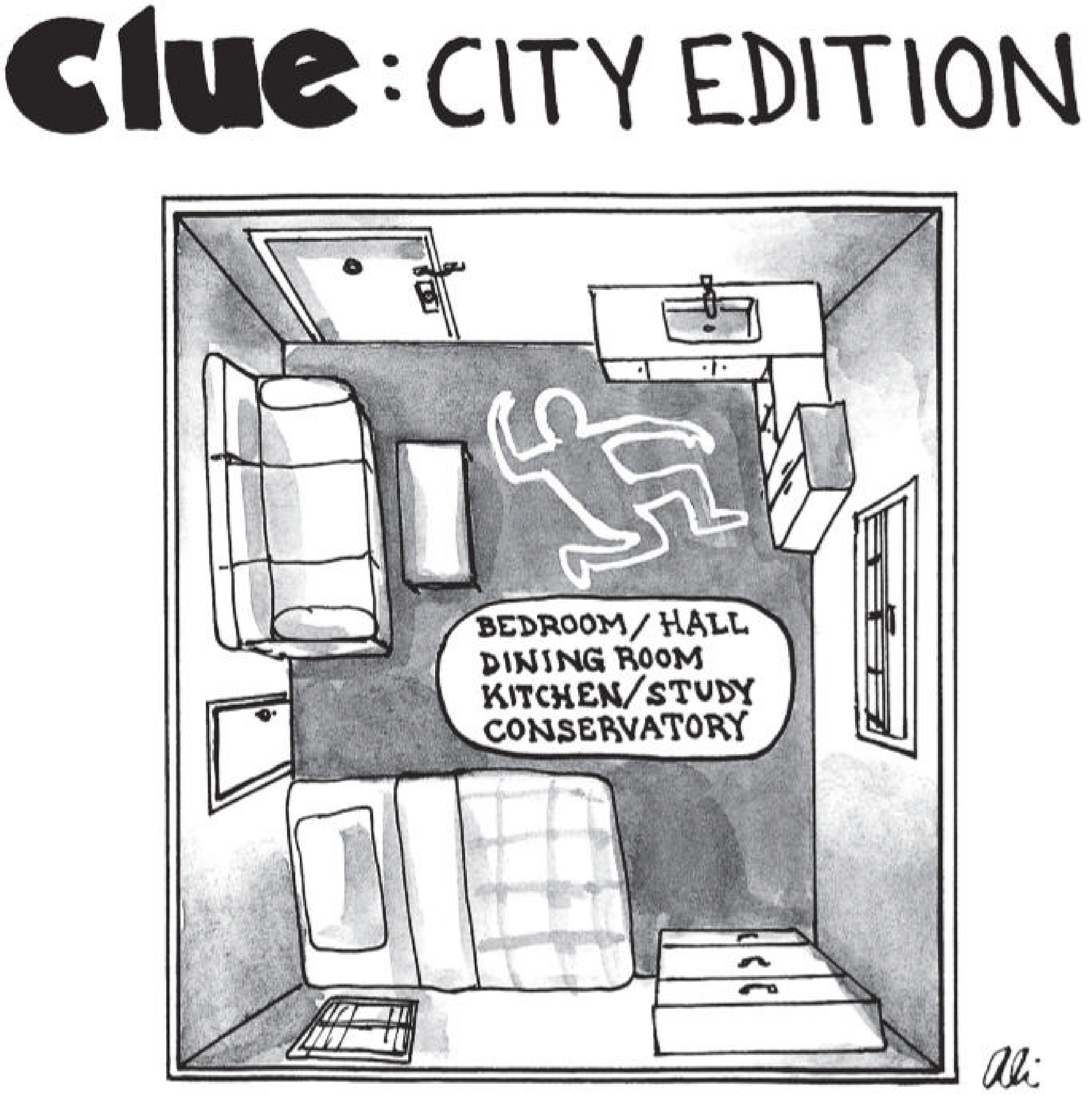
Every elephant in the orchestra had its own peculiar talents and interests. Mei Kot couldn't stop playing the gong. Phong preferred the ranat—a kind of giant marimba. (When Sulzer was recording the orchestra's second album, Phong walked up to the ranat with his mallet, improvised a long, intricate solo, then dropped the stick and walked away.) Prathida had excellent timing—some thought it was even better than Luk Kop's—and a gift for finding an instrument's sweet spot, where it resonated best. One day, as an experiment, Sulzer replaced one of the bars in Prathida's ranat so that the note it played was badly out of key. "She hit it once and then avoided it," he told me. "But then, after five minutes, she started playing it over and over." Like a punk rocker or a modern composer, he later wrote, Prathida had discovered the joys of dissonance.

Other species seem to be equally musical. A dolphin can learn to play an underwater keyboard with its beak and imitate the sounds it hears, the psychologist Diana Reiss found. Then it can use those sounds to communicate with its trainers. A bonobo named Kanzi, studied by the primatologist Sue Savage-Rumbaugh, learned to improvise on a piano well enough to jam with Peter Gabriel. (When Sulzer tried a similar experiment with the bonobos at the San Diego Zoo, they preferred tossing the instruments to playing them.) Three years ago, the philosopher and jazz clarinettist David Rothenberg released a double album of music he had made with nightingales in Berlin. His recording method was simple: he waited for the birds to congregate in trees, set up his trio under the branches, and spent the evening trading licks with them. Still, when animals make music with humans, the result can be hard to judge. Is it art, mimicry, or irritated compliance? Are the nightingales really singing with the band, or straining to hear their own song above the noise?

"Anthropomorphism is always on my mind," Sulzer told me. It's easy to mistake ordinary animal behavior for something more expressive. The elephants in his orchestra had a highly developed sense of rhythm. But if they preferred percussion to wind instruments, the trainers later told him, it was because they were worried that a snake might be hiding in a mouthpiece. When the elephants played together for longer stretches, they seemed to find a groove, flapping their ears and twitching their tails to the beat. Sulzer assumed, at first, that they were moving to the music, but they were just getting overheated. "Elephants only have sweat glands in their toes," he says. "So they have to flap their ears to cool off. And swinging their tails, frankly, means a little bit of boredom."

One morning in May, Sulzer and I took a field trip north of the city, to Rockefeller University's Center for Field Research in Ethology and Ecology, near Millbrook, New York. I asked Sulzer to do the driving, so that I could take notes as we talked. He seemed a little rattled at the wheel, slowing down for green lights and crawling up the Taconic Parkway at forty miles an hour. Like a true New Yorker, Sulzer hardly ever drives. It took a catastrophe to get him to the research center the first time. On September 12, 2001, the day after the Twin Towers fell, Sulzer fled to Millbrook to escape the dust and despair that engulfed lower Manhattan.

"I was just ten blocks away—I watched the second plane hit the tower," he told me. "I thought the neighborhood was going to blow up, honestly." The fires at Ground Zero burned so hot that Sulzer feared the gas lines might ignite beneath them. "So I kissed my cat goodbye and came up here the next day," he said. His girlfriend at the time was studying with the neuroscientist Fernando Nottebohm, then the director of the research center, so Sulzer drove up to join her. He ended up staying a week—though he went home every day to feed his cat.



The research center lies in a secluded glen of hardwoods and sunlit meadows. Its quaint, half-timbered buildings look like a Disney set for "Beauty and the Beast"—they were once the gatehouse and stables for an estate owned by an heiress to the Standard Oil fortune. When we arrived, we were met by Ofer Tchernichovski, an animal behaviorist and Sulzer's sometime collaborator. Born in a village near Tel Aviv in 1963, Tchernichovski has a stocky build and a brusque manner, almost childlike in its directness. He has a moon-shaped face, a mop of white hair, and eyes that squeeze into cheerful slits as he talks. He led us across the grounds in long, eager strides, talking as he went, then crouched down suddenly to look at something in the grass: a small frog. "I just love it here," he said, watching it hop away. He'd recently seen a snapping turtle lay a clutch of eggs at a pond nearby, he added, then pointed to a deer emerging from the edge of the woods. "See how it turns to us? They'll lift their tail and run, but first they always turn around and stare. They're saying, 'I see you. But all you're going to see is my ass.'"

Tchernichovski says that he has never had a good hypothesis in his life. But he is a tireless observer. Behavioral research is all about "letting the animals tell you how they understand the world," he told me. When he was working on his doctorate at the University of Tel Aviv, he built a giant rat compound on the roof of the zoology building, then spent months watching the inhabitants colonize it. The rats, he found, didn't establish a single home base, as people assumed. They built a network of small shelters, like safe houses, and shuttled between them like covert operatives. "When you look at a species, you always ask yourself if you can generalize from their behavior," he said. Some behaviors hold true across species—most animals prefer to defecate in private, for instance—but others do not. Only turkey vultures and a few other birds like to shit on their own feet.

Of all the world's humming, squawking, buzzing, and growling creatures, birds may be the most single-mindedly musical. They sing when the sun rises and again when it sets. They sing to find mates and to claim territory. They sing to soothe their chicks and to sound alarms. At one point, Tchernichovski told us, he compared the songs of forty-five thrush nightingales with human songs from six cultures. On average, the birds could keep a beat and steady tempo as well as people could, but they processed rhythmic changes much faster and more accurately. "Birds really are the world champions," he said. Still, it's not clear how much we can generalize from that. Do birds take pleasure in singing, or is it just utilitarian? Do they share our sense of beauty in music?

When Sulzer first came to the research center, in 2001, he was in the middle of a bird study inspired by Tchernichovski's work. Tchernichovski had outfitted a zebra finch's cage with a lever that a bird could push with its beak to trigger a recording. If the lever was programmed to play the song of a male finch—female finches make simple, expressive calls, but they don't sing—a baby finch would press it over and over. Sulzer wondered if other songs might have a similar effect. For his study, he built rows of levers, like miniature bird pianos, each of which triggered a different recording. "I thought, Birds like to sing, but do they also like to play?"

He began by programming the levers to play birdsongs of various species. At first, the finches wanted to hear only their own songs, but they slowly began to branch out and play others. Then Sulzer replaced the birdsongs with human music. He never trained the finches or offered them any rewards for pecking the levers. And yet, little by little, they began to gravitate toward certain recordings. Trumpets and flutes were predictably popular, but so were the gongs and xylophones of an Indonesian gamelan orchestra. The birds didn't take to the gamelan right away, Sulzer told me. "They hit that lever very rarely at first. Then, a couple of days later, they hit it hundreds of times."

There were only two levers that the finches avoided. One played a recording of a canary—a large, threatening species. The other played a song by the Oblivians, a noisy garage-rock band from Memphis. The first time they heard the band, the finches shrieked and jumped away from the lever. They never listened to the Oblivians again.

"It's not just that some birds have inborn tastes in music," Sulzer said. "They develop taste." But how does it shape their singing? Do their songs change over time? "Dave really inspired a lot of these ideas with his work with the elephants," Tchernichovski said, when we reached the cottage that housed his lab. "Science is all about crazy stuff. Scientists who are very level-minded—those aren't real scientists."

The front room of the lab was equipped with a large computer server, a row of analog-to-digital converters, and a pair of screens that were monitoring live recordings. The recordings were coming from a small room in the back, filled with insulated boxes with wires sticking out of them. They were Tchernichovski's version of recording booths. He made them out of ice chests—"You can buy them premade for two thousand dollars, but mine are two hundred"—and fitted each one with an air-circulation system and lights that would rise and fall like sunlight over the course of a day. He added a mirror, so the birds could see themselves and not get lonely, and a lever. "It's a world in a box," he said.

To see how zebra finches learn their songs, Tchernichovski took male chicks that had been raised entirely by females and isolated them in the boxes for two months. Perched in the corner of each box was a fake bird taken from a Christmas-tree ornament. If the chick pecked the lever, a hidden speaker in the fake bird would sing a male finch's song. Tchernichovski ran the experiment with three hundred chicks. He recorded them continuously and analyzed more than a million sounds per bird. The results, plotted on the monitors next door, looked a bit like old-fashioned sing-alongs: follow the bouncing ball. The chicks' songs began as single tones, like syllables, represented as colored dots. They slowly established a rhythm, gathered into clusters, like syntax—long, high-pitched sounds; short, low-pitched sounds—and finally developed repeating motifs.

"They build a word, a sentence, a story," Tchernichovski said. "It's like embryo development—like a body, head, and limbs." The first time a chick hears a male finch's song, it doesn't make a sound. It just falls asleep immediately, as if knocked cold by the revelation. When it wakes up a few minutes later, it plays the song again and again. By morning, the bird can sing it by heart. "We knew from behavioral studies that there were huge changes overnight—that in the morning something crazy happens," Tchernichovski told me. At the University of Chicago, the neuroethologist Daniel Margoliash and the neuroscientist Amish S. Dave recorded the brain activity of zebra finches as they slept and dreamed. It had the same pattern as when they were singing. "The birds were doing playbacks of their songs in their brains," Tchernichovski said.

One of the recordings that he had analyzed was from a box that held both a male and a female finch. Onscreen, the female's calls were represented by red dots, the male's calls by blue. At first, they clustered in separate patterns, like children in day care playing side by side on the carpet. Then, day by day, the two sets of dots began to mirror each other, to repeat the same patterns. By day four, the two calls were fully in synch. "You can really see where they fall in love," Tchernichovski said.

In the wild, zebra finches typically live in colonies of between four and twenty birds. The Rockefeller research center has more than six hundred. When Tchernichovski opened the door to the room where they were kept, a wall of sound tumbled over us, like a rock-concert crowd on helium. The birds flitted from corner to corner in their cages, quick little sprites with black-and-white breasts and flame-orange beaks. They called back and forth to one another in fluctuating patterns: *Taka tow tow*, *taka tow tow*, *babadoo babadoo babadoo*. Tchernichovski grinned, basking in their voices. "I love zebra finches," he said. "There is so much drama. I can tell if they're excited or looking for something or interested in sex. It's like their state of mind is pouring out of them."

The birds knew him by his white hair, he said. They liked to fly over and pull at it when they were out of their cages, thinking it might make good nesting material. "There is a story about a zookeeper who takes care of his birds every day, and they know him well. Then one day, after twenty years, he goes in to feed them and they panic. It takes him a while to figure out that he's wearing a new hat." The colony was in constant communication with itself, he said. A single tissue of thought. "Silence is the real signal. The moment someone stops calling, they know something is wrong."

He walked to the middle of the room, flanked by tall racks of cages, and smacked his hands together. A hush fell over the room. "Now watch this," he said. He whistled a high, clear note—two kilohertz, he later told me, the finches' preferred frequency—and waited. For just a beat, the air in the room seemed to tense up around us, as six hundred birds held their breath. Then they exploded into a raucous cheer. "Listen to them!" Tchernichovski said. "They're so excited. You can feel the soul of the animal."

We think of birds as creatures of habit, singing the same songs day after day. A few species, such as phoebe flycatchers, do seem to repeat the same innate calls all their lives. But others are as delighted by novelty as we are—the odd note, the new rhythm, the impromptu cadenza. Finches are thought to be especially set in their ways: their songs hardly seem to change after the first ninety days. Tchernichovski thinks we're not listening closely enough. When he records three-year-old birds that he also recorded as chicks, their songs seem to have been subtly revised, remixed, layered with new rhythms and motifs. "An older bird might add *Tadadam tadam bababam*, *tadadam tadam bababam*," he said. "There is more complexity, a higher level of organization." He has no idea at what point in life that complexity is acquired. But it's there.

A song is never as simple as it seems, Sulzer and Tchernichovski say. It's both signal and noise, message and meaningless pattern. It can seduce and repel, say "I'm with them" and "I'm not like them" with equal conviction. It's how we define ourselves against ourselves. From the moment we're born, we're taught to sound like our parents. But who wants to sound like their parents? So we make our songs our own.

Sulzer has yet to settle on his own sound. He has spent the past forty years at the restless edge of the avant-garde, never committing to a style long enough to claim it. At one point, as if to show how arbitrary our tastes can be, Sulzer and the Russian artists Komar and Melamid recorded an album called "The People's Choice: Music." It had only two tracks. Both were based on a survey that asked five hundred people which musical instruments and themes they found most appealing and which ones they found most unappealing. "The Most Wanted Song" was a love ballad scored for guitar, saxophone, bass, drums, and piano. "The Most Unwanted Song" was a cowboy tune for bagpipe, accordion, tuba, and children's voices. The latter, ironically, proved far more popular. "It has lots of fans," Sulzer says. "Over a million plays on YouTube."

Still, he began to feel as if he had painted himself into a corner. The destruction of the two towers had left him reeling, in need of something more from his music—some sense of how it could help heal the world and not just comment on it. He worked with groups of children in East Harlem and Guatemala, improvising hip-hop tunes and Mayan mountain music. He immersed himself in flamenco, inspired by the music's extravagant passions, its roots in a rare confluence of Romani, Moorish, and Jewish exiles. He wrote gospel songs on the theme of St. Francis, lover of animals, with words in the saint's ancient North Umbrian dialect. "I wanted more emotion," he told me. "I thought, How can I work with professional musicians where I get the same deep feeling that I get from the children and elephants?"

We were sitting in the living room of his apartment in Chinatown, late at night, after one of his classes at Columbia. All around us, the desks and bookcases were covered with the tools and detritus of a working musician: keyboards and monitors, piles of sheet music and empty instrument cases. A lyre from Nairobi lay on a table in the vestibule, next to some panpipes from Vietnam, a hand-carved kettle drum, and a banjo made from old 45 records. The neuroscientist in Sulzer seemed nowhere in sight. Then he stepped over to one of the keyboards and showed me his most recent score.

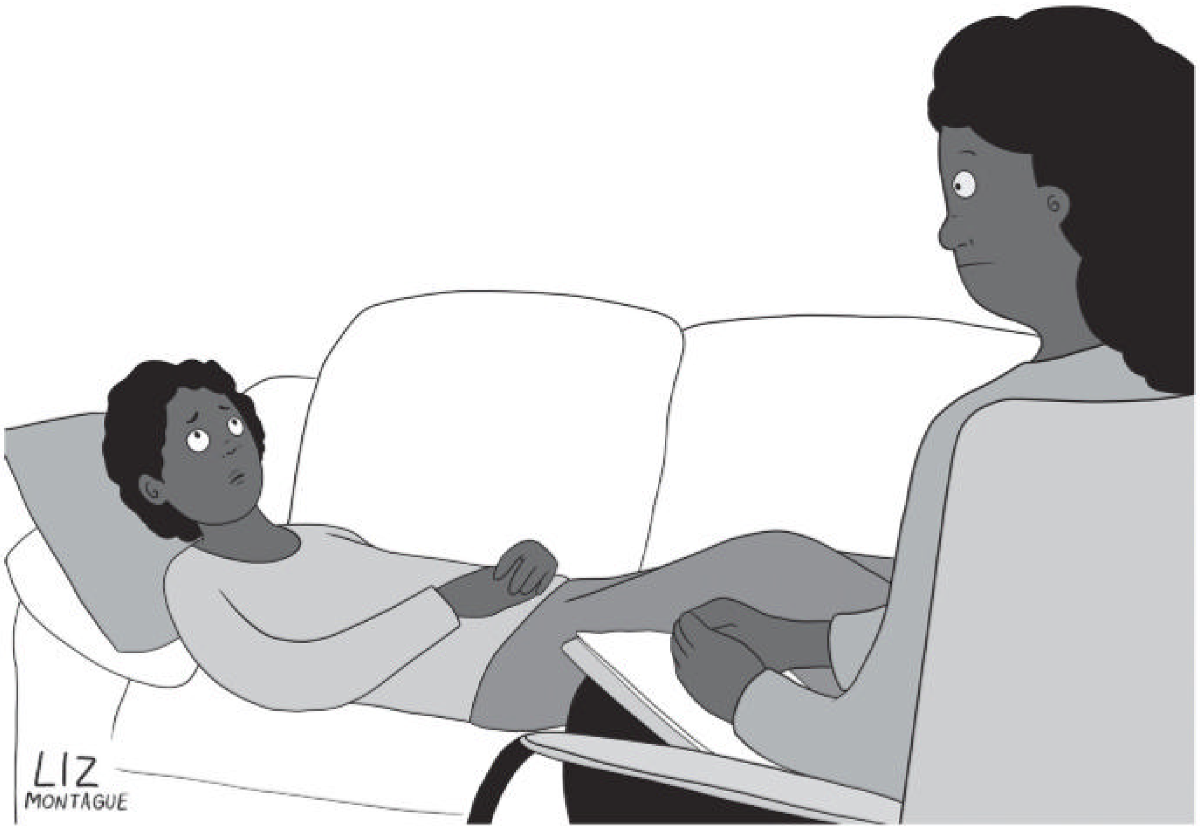
Of all his compositions, this one probably came closest to joining his two halves. It was a four-part motet based on Johannes Kepler's "Harmonice Mundi"—"Harmony of the Worlds." First published in 1619, Kepler's treatise was both an abstruse work of mathematics and a vision of the universe as a kind of celestial music box. Kepler worked out the planets' elliptical paths around the sun with remarkable accuracy, then compared their motions to notes in a chord, ringing in perfect harmony. In the final book of the treatise, Kepler urged the composers of his era to set his equations to music. "To him who more properly expresses the celestial music described in this work," he wrote, "Clio will give a garland, and Urania will betroth Venus his bride."

A number of composers had taken up the challenge over the centuries, Sulzer said, but they'd all fudged the mathematics. He was determined to play by the rules. Was it hard to do? I asked him. "Fuck yeah," he said. "But it was also kind of fun." In his piece, as per Kepler's instructions, the parts of Saturn and Jupiter were sung by basses, Mars by a tenor, Earth and Venus by altos, and Mercury by a soprano. Their notes cleaved closely to Kepler's calculations: Saturn's part ranged from G to B and Jupiter's from B to just above D, for instance, but Venus, with her more circular orbit, could only oscillate between E and E-flat. Kepler wanted listeners to feel as if they were standing on the surface of the sun, hearing the harmony of the spheres as the planets circled around them. The closer each planet came to the sun, the higher its notes ascended.

Sulzer opened a MIDI file on his computer and played me a passage. Its synthesized voices were a poor substitute for celestial singing, its harmonies as eccentric and stubbornly mathematical as Kepler's theology. But later, when I heard a vocal group called Ekmeles perform the piece in a studio, I found it strangely moving. The music wasn't luminous and ethereal, as I had expected. It was earthy and heavy-footed, full of steady, stomping forward motion. It was like an angry crowd that slowly, grudgingly joins in a folk dance. When the ethereal harmonies did come, they flashed through the music and quickly faded, like the sun's rays at the edge of an eclipse. "That's what Kepler was looking for—a moment of consonance in the universe," Sulzer said. "Usually it's not there. But, when it is, it's evidence that God did something right."

The world is full of music we can't hear, Sulzer says, hidden in messages and melodies, patterns and harmonies that move through and around us all the time, beyond the range of our perception. It's in the high harmonics of the swirling atmosphere and the subterranean chords of shifting plates. In the voices of creatures that communicate at frequencies far above and below our speech. Mice that squeak to one another ultrasonically as they move through our walls on padded feet. Birds that flicker by so fast we barely hear their songs—it's only when we slow down their melodies that they sound like ours. Whales that sing song lines so leisurely they last for hours and transmit halfway across the ocean before they're done.

When Sulzer was working with the elephant orchestra, he knew that the music they played wasn't really their own. It was just an approximation, as foreign to them as fiddling on a cricket's wings would be to us. The orchestra went on to record three CDs, including Sulzer's arrangement of Beethoven's "Pastoral" Symphony for elephants and marching band. They played for the Queen of Thailand and the BBC World Service, and appeared in a Moment of Zen on "The Daily Show with Jon Stewart." But no one could hear what the elephants were humming to themselves, in the deep subsonic of their own frequency, as the drums clattered and gongs crashed. "We are just at the beginning," Sulzer told me. "There is a whole auditory world around us that we've ignored." Not quite the harmony of the spheres, but music enough for this one. ♦



"I just really thought this was going to be the lip gloss that changed everything."

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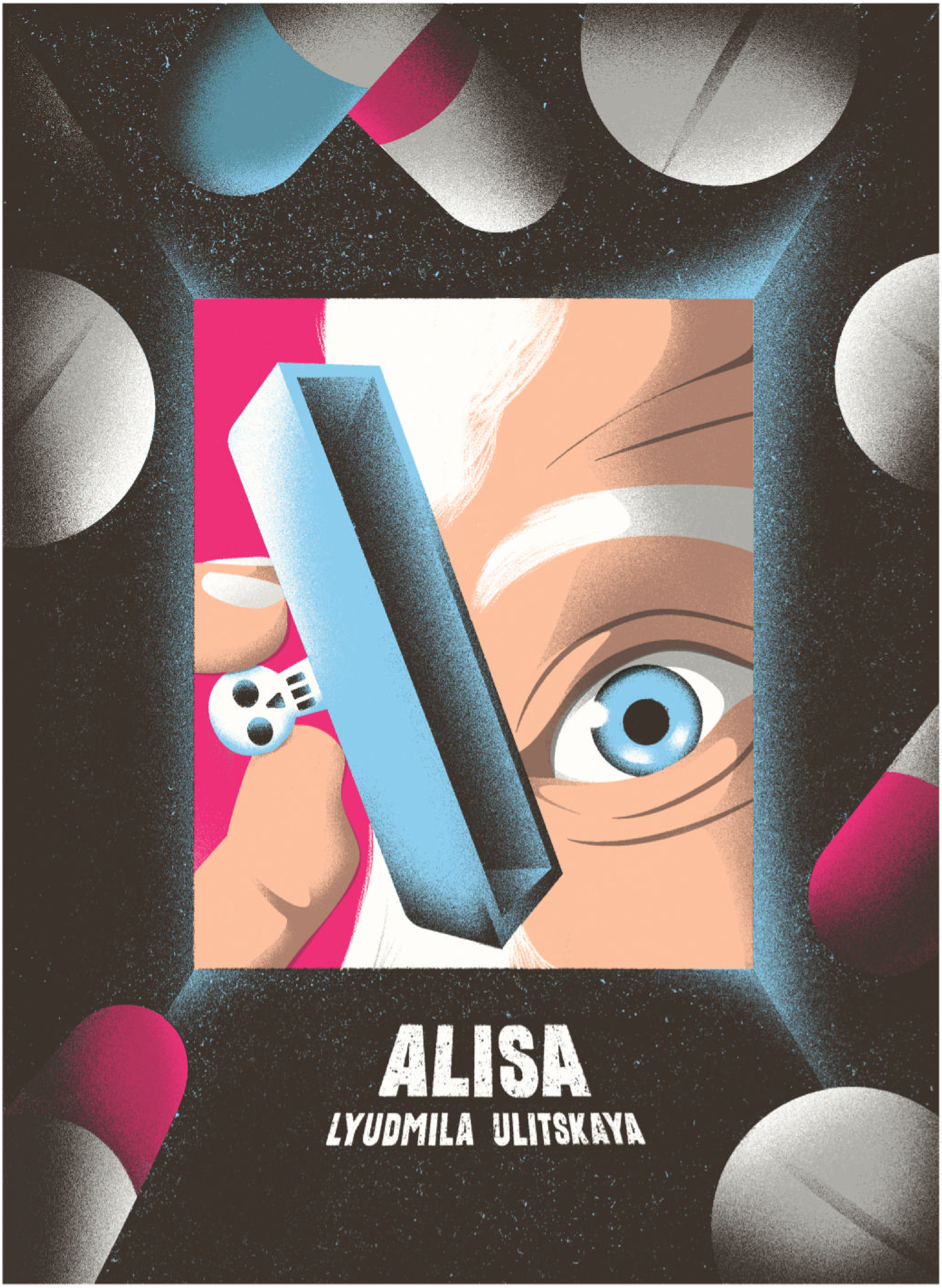


ALISA

LYUDMILA ULITSKAYA

ILLUSTRATION BY GOLDEN COSMOS

By the time life was brought to perfection, old age had arrived. The last costly touch was a small bathtub, installed after a lot of reflection and searching. Some recommended that she get a stall shower, but Alisa resolutely rejected having a vertical bath with a door: what good is water raining down on your head? It's so much better to lie in warm water with a rubber pillow under your head, your softened feet rolling two pleasantly prickly plastic balls. . . .

Alisa belonged to the rare breed of people who know with perfect certainty what they want and what they don't want under any circumstances.

By an early age, the mixed blood—half Baltic, half Polish—she inherited from her mother had cooled off all Alisa's passionate impulses, and the fear of falling into another person's power was stronger than all the other fears proper to women: of solitude, of childlessness, of poverty. Her mother, Martha, who had married an Army general before the war, a marriage that resulted in Alisa, had to bury her general when she was still young. For the rest of her life, she was always passionately in love and suffered spectacularly, to the point of the psych wards. She was always ready to bring to her new lover's feet everything she owned, including the apartment her general had left her.

After breaking up with her latest lover, Martha committed suicide in an indecently literary manner: having gone to the hairdresser and the manicurist, she threw herself under a train. In Alisa, her mother's insane behavior totally paralyzed any possibility of a futile and fruitless self-sacrifice.

Several former lovers came to Martha's funeral, including the last one, who had abandoned her, thereby inflicting the deadly blow. They unloaded a mountain of flowers on the closed coffin, and the twenty-year-old Alisa, with her pale, not-quite-developed loveliness, despising and ashamed of her mother's excessive sensuality, swore to herself that she would never become the plaything of such animals. And she didn't. Hers was not a burdensome asceticism but one of rare, insignificant affairs that put her on a par with her peers in life experience.

She worked as an engineering draftsman, was pleased with her excellent performance, knew that no one in her office was able to draw a line better than she did. Toward the end of the twentieth century, computers appeared, and all the draftsmen, even the most distinguished ones, had to put away their pencils and suffer in order to master the program that gave precise commands: "Raise the pen, lower the pen, shift to the point. . . ." But at this point Alisa shifted to retirement.

The happiest part of her life lasted more than ten years: her pension was small, but Alisa found an excellent way of adding to it—three times a week, from ten until lunch, she walked with children in a garden. After that she was delightfully free. Occasionally she went to the theatre, more often to concerts at the Conservatory; she made interesting acquaintances there, and lived for her own good pleasure until one day, out of the blue, she fell unconscious next to the couch in her apartment. Having lain there for some time, she came to and was astonished by the strange angle of vision: the broken cup in a shallow puddle, the legs of the overturned chair, the nappy red-and-blue rug by her face. She got up easily. There was a pain in her elbow. She thought a bit and called the doctor. The doctor took her blood pressure and prescribed some pills. Everything seemed to be the same as before. With one exception: from that day on, Alisa began to think about death.

She did not have any relatives to speak of. The Polish and Lithuanian ones had long since vanished from the picture, having no love for the Soviet power represented by the late general. The general's relatives, for their part, had no love for Martha or for her daughter, Alisa, for reasons no one remembered anymore. . . .

Alisa was sixty-four. She was in good health, except for the fainting fit that had unexpectedly reminded her of the finiteness of life. However, the question was: What if she got sick? Bedridden? Whom could she count on?

Alisa was unable to sleep. She spent several restless nights and then came up with a brilliant solution. It was very simple: once she was overcome by an unbearable illness, she could poison herself. Prepare a good poison beforehand, best of all some sleeping pills, so that she could take them and never wake up. Without stupidly showing off, as her mother had in her time. Anna Karenina, really! Simply take the pills—and not wake up. And in this way avoid, as it were, the unpleasantness of death. . . .

When this thought occurred to Alisa, she jumped out of bed and opened the drawer in which she knew there was a white porcelain box, for powder and other cosmetics, left by her mother. She could put the pills in the box, keep it by the bed, and, once the time came—take them.

Not yet, not tomorrow. But now was the time to think. First of all, she had to find a reliable doctor, who would give her a prescription for the pills in the necessary quantity. Not an easy task, but a feasible one. . . .

After the fainting fit, Alisa lived as usual, taking Arsiusha and Galochka for walks. They were sweet kids who lived in the same building as her; their mother, a well-bred woman, not some crude bitch, gave music lessons in the morning and in the afternoon took care of her children.

Alisa spent evenings at concerts and the theatre, as before, but she did not forget about a good doctor. One evening, she fell to talking with a fellow-theatregoer. They talked about this and that, and it turned out that the woman's brother was a doctor. Incidentally a Jew. So there. Maybe there was something in what people said about them—saboteurs, poisoners. . . . In short, Alisa asked her new acquaintance to bring her together with her brother for a medical consultation.

A week later the brother, Alexander Yefimovich, came over. A sad, thin man with a questioning expression on his face. He thought he had been invited for a private medical visit, but Alisa seated him at the table, served tea. He was a bit perplexed, but the patient was well bred, with a very attractive appearance. Such a woman had never before entered his field of vision. Truth be told, it was long since any woman had entered his field of vision. His female patients he considered strictly from a medical point of view. For three years, he had been a widower, languished in solitude, and refused to listen to the hints of his relatives about the harmfulness of being alone.

The table was laid elegantly, fine

china cups were set on a gray linen tablecloth, the candy was imported, small, not like hefty Russian Bears in the Pine Forest. Alisa Fedorovna herself was, like her cups and her candy, graceful, with thin, unsmiling lips, her pale-blond hair smoothly pulled back. She poured him tea and told him her problem directly: "I need strong sleeping pills, in such quantity that if I take them I will not wake up."

Alexander Yefimovich thought a little, took a sip of tea, and asked, "Do you suffer from an oncological condition?"

"No, I'm in perfect health. The thing is that I would like to be healthy when I pass away. At the moment when I decide to do it. I have no relatives who could take care of me, and I don't have the slightest wish to linger in hospitals, suffering and urinating in my bed. I need sleeping pills so that I can take them once my decision is made. I simply want to buy myself an easy death. Do you see anything bad in that?"

"How old are you?" The doctor, after a long pause, asked a perfectly medical question.

"Sixty-four."

"You look wonderfully well. No one would guess you were more than fifty," he observed.

"I know. But I didn't invite you to pay me compliments. Tell me definitively whether you could prescribe me the necessary medicine in a sufficient dose. . . ."

The doctor took his glasses off, set them down in front of him, and rubbed his eyes.

"I need to think. You see, in principle, barbiturates are prescribed in a special way. . . . It's a matter of legality."

"But in this case it's very well paid," Alisa Fedorovna said dryly.

"I'm a doctor, and for me it's a moral question first of all. I confess, it's the first time in my life that I've met with such a request."

They finished the tea. They parted, with the doctor promising to think and to call and tell her what he decided.

Now it was Alexander Yefimovich who could not sleep. She would not leave his head, this thin, pallid woman, so unlike any he had met in his life. Most unlike his wife, Raya, who had been cheerful, with constantly straying, crumpled strands of hair, with cardigans always threadbare over her big breasts, noisy, even loud . . . and how painfully Raya had departed, eaten up by sarcoma, with bouts of monstrous suffering unrelieved by morphine.

For a whole week he was unable to come to a decision, thinking every day about calling this astonishing Alisa and being unable to solve the little moral problem she had posed for him. A direct, honest, most worthy woman! It would have been easy for her to complain of insomnia, ask for some sleeping pills, which he would have prescribed, save up ten or twenty doses—who would check?—take them, and fall asleep forever.

An unplanned meeting occurred at the Conservatory, at Pletnev's concert, in the intermission after the suite from Tchaikovsky's "Sleeping Beauty" and before a Chopin sonata. Alisa did not recognize him at first, but he recognized her—instantly. She stood at the bar with a glass of water, looking around for a free chair. Alexander Yefimovich bowed to her from a distance. Rose, nodded in invitation, and she sat down in his vacated chair. . . .

After the concert, he accompanied her home. While they had been listening to music, it had been pouring rain. Puddles spread across the whole street, and the bronze Tchaikovsky in his bronze chair sat in a small pool of rainwater. The doctor took Alisa Fedorovna's arm. Her arm was light and firm—as Raya's had been when he first accompanied her after their high-school graduation party. He walked along, marvelling at this long-forgotten tactile sensation.

Here's a man who doesn't want anything from me, Alisa thought. It's I who expect a favor from him.

They talked about Pletnev, he mentioned Yudina, observing that since her death it had been Pletnev who best represented the type of musician who takes upon himself the right to offer a new personal interpretation of the classics. Alisa Fedorovna realized that she was talking to a man who felt music deeply, like a professional, not a superficial listener like herself.

He took her right to her house, finding without any difficulty in the depth of the unlit courtyard the two-story annex he had visited a week earlier. He had an excellent sense of orientation, both in the forest and in the city: he easily found a place he had seen once. They stopped at the entrance.

They were already saying goodbye, but she could not bring herself to repeat the question for which she had invited him a week ago.

There was an awkward pause, which he broke with the questioning expression that was peculiar to him.

"Alisa Fedorovna, I'm ready to accede to your request, but I would like to come to this question later, when"—he was clearly struggling to find the right words—"when the circumstances are ripe. Till then I take upon myself the care of your health."

She nodded. No one had ever taken upon himself the care of her, and she would not have allowed it! But it felt good to hear it. She offered him her light, firm hand and took hold of the door handle. The entryway was dark.

"Allow me. . . ." He followed her into the damp darkness.

In the darkness she felt for the first step and tripped slightly. He caught her from behind.

This was how their love affair started—the falling back into youth from a chance touch, the first kiss in the entryway, the burn of the unexpectedness, the feeling of complete trust in the man in Alisa's soul.

And Alisa entrusted more to him than women entrust when young—not her life, but her death.

The happiest year in Alisa's life began. Alexander Yefimovich did not disturb the soft cocoon of solitude that Alisa had woven and in which she felt protected. In an astonishing way he even strengthened this protection. As if he provided her with a cover from above. What particularly amazed Alisa was Alexander Yefimovich's ability to guess her whimsical taste. Without asking a single question about what she preferred, he brought her firm green apples and pink marshmallows, her favorite striped caramel, lilacs not white but purple, and the special Kostromskoy cheese. Everything she liked.

Alisa was always sensitive to smells, and all the men with whom she had once had relations had smelled of metal, or tobacco, or some animal, but this lover of her old age smelled of the mild baby soap with which he washed his hands before and after examining each patient. The very soap that Alisa had always preferred to all those other artificial scents . . .

Alexander Yefimovich, who had lived all his life next to a powerful and demanding woman with extensive needs, tireless in having various, mutually exclusive desires, discovered for the first time that it was possible, next to a woman, to be free from inexhaustible female power. Reserved Alisa, timid even in moments of intimacy, radiated silent gratitude. At the end of his seventh decade he felt himself not a lifelong hired serviceman but a generous giver of joy. In moments of tenderness they called each other by the same teenage nickname, Alik.

Alexander Yefimovich had worked for many years as a neurologist in the clinic of the Russian Theatre Society, and, owing to his patients, had vast connections. He took Alisa on weekdays to the best performances of the season at the Conservatory, and on Saturdays came to her place for an intimate supper. For the first time in her life, Alisa cooked not for herself alone. . . .

Life changed, age retreated, and only one thing was troubling: somewhere far off hovered the nagging thought that this unplanned happiness could not last.

Alisa knew that after his wife's death he had lived with his younger, unmarried daughter, Marina, who was not quite healthy and not quite happy. The older, Anya, healthy and happy, had long lived with her husband and their two school-age children.

During the whole winter the couple met like enamored teen-agers, and in the summer they went on vacation together, disrupting the plans of the younger daughter, who was used to spending summer vacations with her parents. But Alexander Yefimovich did not inform Alisa of this upsetting conflict with his daughter. He bought two vouchers to Komarovo, and in the middle of the summer, when the white nights dimmed and the cool Petersburg heat was not tiring, they arrived at the House of Creativity.

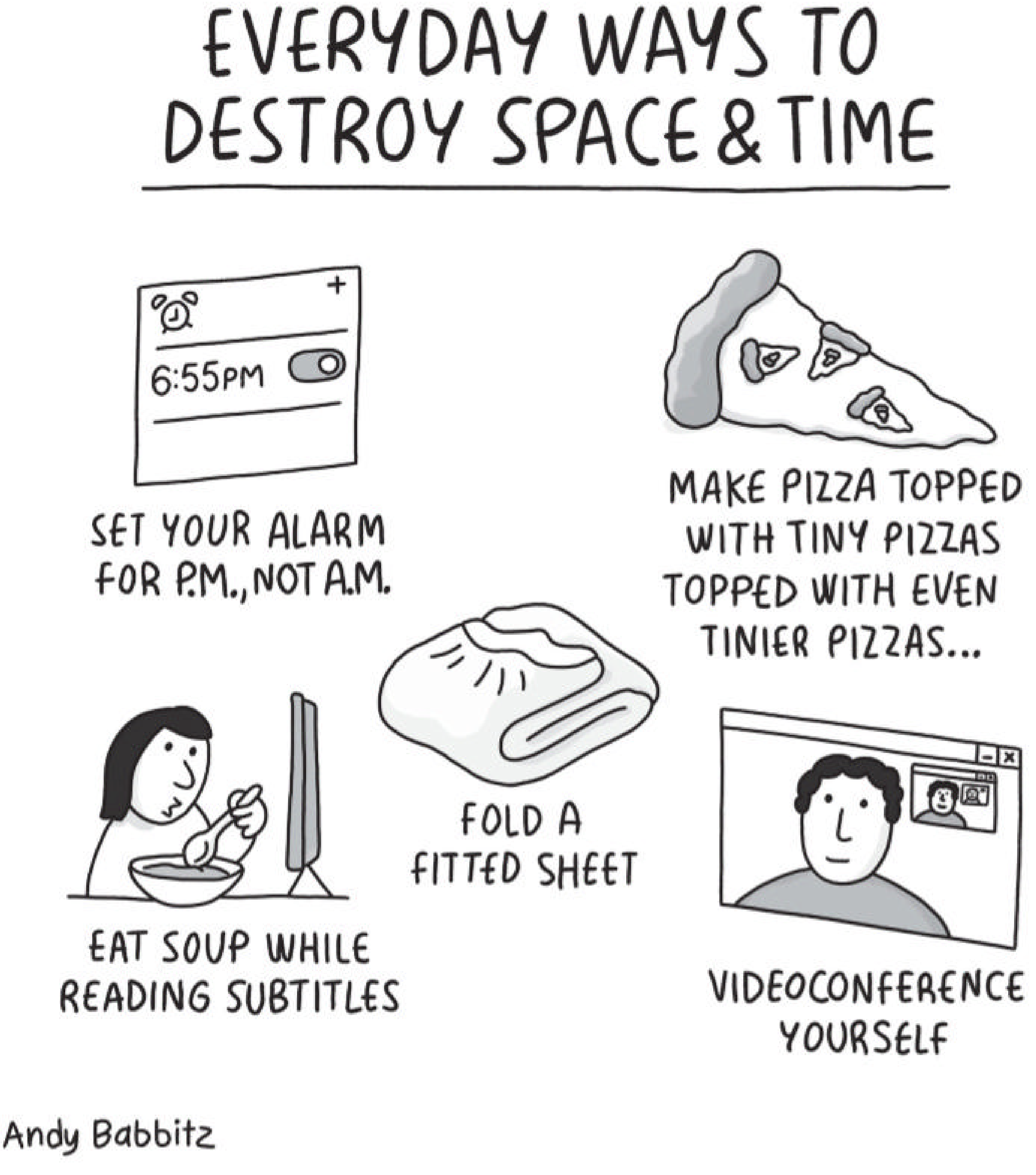
They stayed in separate rooms at opposite ends of the corridor and were amused by their mutual evening visits.

"You and I, Alik, are like schoolchildren hiding from parental eyes," Alexander Yefimovich said, laughing, when Alisa opened the door for him after a faint rhythmic knocking.

Alisa only smiled mysteriously in response: her first, sluggish love affair had occurred five years after her mother's death, when her classmates and peers had already managed to acquire husbands, children, and lovers, to get divorced and marry again, and so she had no idea of precisely how teen-agers conceal their love affairs from their parents. Her mother, Martha, never thought of concealing her affairs from Alisa; they were all well displayed, and Alisa had suffered from their noisy passions.

All that Alisa had lacked in her youth was showered on her in her old age, and she was slightly embarrassed by her status as a mistress, especially in the mornings, when they went down to the hotel's restaurant, filled almost uniformly with elderly couples long weary of their marriages. After breakfast they went on lengthy promenades, occasionally missing lunch and returning only toward evening. This was their first time in the formerly Finnish land; they knew little about its history and geography, and they wandered at random, now crossing the dunes and emerging onto a sandy beach with occasional boulders forgotten on the shore in the ice age, and now straying to Pike Lake, where bathing was much more pleasant than in the Finnish Bay, overgrown with some brownish slime.

At the lake they met one of Alexander Yefimovich's acquaintances, an actor and a former patient who had lived in Leningrad and was an old-timer in these parts. He sat with his sleepy fishing rod in the fruitless hope of catching, if not a pike, then at least a small perch, and was glad to see the doctor. On learning that the doctor and Alisa were here for the first time, he volunteered to show them the former Kellomäki. He took them around the


EVERYDAY WAYS TO DESTROY SPACE & TIME
6:55PM
SET YOUR ALARM FOR P.M., NOT A.M.
MAKE PIZZA TOPPED WITH TINY PIZZAS TOPPED WITH EVEN TINIER PIZZAS...
FOLD A FITTED SHEET
EAT SOUP WHILE READING SUBTITLES
VIDEOCONFERENCE YOURSELF
Andy Babbitz

village, showing them the old Finnish dachas, those that had not been dismantled and taken to Finland when this land became Russian, took them to Shostakovich's dacha, to Akhmatova's cabin, restored and painted a cheerful green, to the dachas of the very little-known academician Komarov and the very well-known academician Pavlov. . . . For three days they walked around with this volunteer guide, then broke away from him and wandered in a sparse forest gathering blueberries and sour raspberries. . . .

The twenty-four days of the voucher went on endlessly, and in the course of those long days and short nights they became as close as if behind them were many years of living together.

When they returned to Moscow, Alexander Yefimovich proposed. Alisa was silent for a long time and then reminded him of her request, with which he had never complied. He had managed to forget what it was about. The sleeping pills . . .

"Alisa, Alisinka, why? Why on earth now?"

"Especially now," Alisa said, smiling.

"I don't understand. . . ."

"Because this is going to end . . . and I want to be prepared."

He already knew that it was useless to argue with Alisa.

"This is madness. But I accept."

Alisa took the little porcelain box out of the drawer and handed it to Alexander Yefimovich. "Put them in here."

This was some shift of consciousness, but there was nothing he could do about it.

"All right, all right. But first we'll get married. And then I'll put them in here—as a wedding present."

He laughed, but he received no smile in response.

"This marriage—isn't it ridiculous? And what will your daughters say?"

"That doesn't matter in the least," he said, and fell to thinking. For the younger, the unsettled one, with her unstable psychology, it could be a real blow. . . .

KOMOREBI

As I awake, iridescent light penetrates
pines in the back yard. On the television,
helicopters and armored vehicles confront young people.
Though I've lived in some faraway places,
this was not when great events were decided.
No one ever shouted in my face, "Damn your soul."
I live in a house, like a mouse in a date palm.
Some nights, I dream of smoking opium,
but mine is a cautious, quiet life: my belly is supple;
I rent an upright piano; I feel sorry about Adam and Eve,
but I cannot fix things. Inside the walls of my abode,
I am a novitiate to the Art of Poetry.
Though I dig home cooking more than threesomes,
I would never say, "You are so fine, Henri."

—*Henri Cole*

In the fall, soon after the first anniversary of their acquaintance, Alexander Yefimovich turned seventy. He organized a modest tea party at work, received as a gift from his colleagues a new leather briefcase, which differed from the old one only in the number on the silver badge—"70" instead of "60."

For friends and family he organized a dinner at the Anchor restaurant. Alisa did not want to come. He insisted—this would be the best occasion to meet his daughters. Alexander kept advancing, Alisa kept retreating. He had already introduced her to his close friends, his schoolmates Kostya and Aliona and his fellow-students the psychiatrist Tobolsky and the obstetrician Pritsker. His family was the last hurdle.

After some hesitation, he invited his cousin, who had introduced them, and Musya Turman, his late wife's closest friend. This was a risky gesture, but strategically faultless. He was conducting his preparations on a broad front.

Alisa still hung back. She fussed till the last moment, now consenting to go to this reception, then refusing. She had long grown accustomed to being a queen: it was of no importance to her whether she was liked by those around her or not—queens do not feel this dependence on other people's opinions. But here she became anxious and immediately felt annoyed with herself.

Alexander Yefimovich finally managed to persuade her, an hour before leaving home: "You mean too much to me, I can no longer conceal you. Besides, I have to prepare them all. . . ."

And she surrendered.

They came almost simultaneously; by ten past seven the guests were all sitting at the table.

"I would like you to meet Alisa Fedorovna," Alexander Yefimovich proudly announced, and introduced each guest in turn to Alisa: Anya with her husband and the two grandchildren, Marina, Musya Turman.

Alisa was impeccable, and she knew it. Her tobacco-colored silk top was cinched at the slender waist with a soft leather belt, and hers was the only waist among the barrel-like figures of the ladies. The guests were somewhat stunned, even the daughters, who had been warned that their father had invited his lady friend. Musya Turman sat there speechless—she glanced at this person with the late Raya's eyes and felt insulted.

"Nothing to look at," she whispered to Anya. But Anya did not second her.

"Why, Aunt Musya, she's a very interesting woman. And her figure . . ."

"Figure, figure!" Musya snorted. "She's a manipulator. She'll show herself, just mark my words!"

But the waiter was already pouring champagne, and Alexander's friend Kostya raised his glass.

Kostya, gray-haired, jowly, rotund, began to speak. Sashka and he had known each other for sixty-seven years out of seventy, knew each other so well that sometimes they couldn't tell where the boundary between their thoughts was, he no longer knew who first said, who first thought, they were more than friends and more than brothers, and all his life he, Kostya, had followed after and never caught up with him. . . . And there were more words, all of them praiseful and somehow merry. And in the end he said that he was glad to see next to Sashka the magical Alisa, who came to us from Wonderland. Alisa produced a cool smile. . . .

A month later they quietly and casually registered their marriage. Alexander Yefimovich fulfilled his promise: the little porcelain box, filled with little white pills, now sat on the desk next to a stack of writing paper, envelopes, and outdated subway tickets.

With astonishing delicacy Alexander Yefimovich introduced himself into Alisa's apartment, not disrupting anything in it but, on the contrary, solidly repairing everything that hung on a string or had been held together with tape. He fixed the loose branch of a chandelier and replaced the burner that had long been out of order, and Alisa had an ever-strengthening feeling that his medical abilities extended to curing everything he touched. Without extraneous help, the plant on the windowsill began to bloom—something it had never done before.

The spouses, who had had no complaints about their health even before, grew visibly younger.

"The hormonal cycles have started over," the husband laughed.

Toward spring, another unforeseen and improbable event came to light: Alexander Yefimovich's younger daughter, Marina, who was almost forty, became pregnant. A birth defect—a cleft lip and palate, and then small scars left on her face by a quite successful surgery—had distorted her character more than her appearance. Since childhood, she had avoided all company, choosing the career of a proofreader, which allowed her to keep company only with texts. Her father was amazed by the fact of her pregnancy. He was also rather glad, understanding that he would leave his daughter not alone but with a child, who could replace for her the whole world, which she regarded as hostile.

Alisa nodded vaguely when he told her: she had her own thoughts concerning childbearing, but she felt no need to share them with her husband. The less so as her thoughts had long since lost all topical interest.

When Alexander Yefimovich shared the news with Alisa, the pregnancy had been concealed in the fat stomach for six months already, but was imperceptible even to an attentive eye. Marina was the same fat, flabby woman she had been since her youth.

When the time of the delivery drew near, the father arranged for his daughter, old for a first birth, to enter a good maternity hospital on Shabolovka Street, where his former fellow-student Pritsker was the head of the department. Considering Marina's age and weight, it was decided to perform a Cesarean section. The surgery was scheduled for a Tuesday morning. Alexander Yefimovich waited for the call from the surgeon and was informed that all was well—the baby girl was without defects, or at least without a cleft lip. Alexander Yefimovich still remembered the horror he had experienced when his wife came out of the hospital with a little girl with a yawning triangular hole from mouth to nose. Now he sighed with relief.

"So I'll go to the hospital," he said to Alisa.

They put together a package of food for the new mother: kefir, milk, candies, and a piece of cheese. He left the house and had a stroke of luck: he saw that some beautiful, fresh hyacinths—Alisa's favorite—had just been delivered to the nearby florist, and he bought a big bouquet for his daughter and for the nurses. The salesgirl wrapped the bouquet in gift paper. He went out into the deserted street in the calm after lunchtime with the flowers and the plastic bag of food. There was a thinnish crowd waiting for the bus. He stood a little apart to protect the beautiful hyacinths from the jostling people when the bus arrived.

Just then, a big black car, driving at high speed in the middle of the street, collided with another car as big and black, and was forced onto the sidewalk. It ran into a lamppost, knocking down three people on its way. One, with a bouquet of flowers, was killed. . . .

In the evening, Alisa called Pritsker. He said that everything was fine with Marina and the baby, but that Alexander had not come. Alisa began to make more phone calls. Fifteen minutes later, she was told that her husband was in the morgue. They had spent the whole day trying to find the family, but at his home address no one answered the phone.

That was the end. "Yes, yes, I've been expecting something like that." The porcelain box in the drawer . . .

Alisa began the next morning with the hospital—took the milk, kefir, and cheese to Marina. Then she went to the morgue. The funeral was delayed by the forensic examination.

Marina was told about her father's death only three days later. She had a breakdown, and Alexander Yefimovich's friend Professor Tobolsky took her to the Kashchenko Institute. For the time being the baby girl stayed in the hospital. . . . Anya, Marina's older sister, was unable to take the baby—her husband, who could not stand Marina, rebelled.

Two weeks later, the baby was taken from the hospital by her grandmother, Alisa Fedorovna. Alisa had had a premonition that her happiness with Alexander Yefimovich would not last, but the premonition had told her nothing about the newborn baby.

The girl lived in a pram next to Alisa's bed. Alisa did not want to move to her husband's apartment, even though it was bigger. There everything was dirty, and the bathtub, with its cracked enamel, was awful, and here there was a new one, shiningly white.

Marina was discharged from the psychiatric hospital after six months. But how could little Alexandra be entrusted to this flabby, slovenly, psychologically troubled woman?

The box with the barbiturates was still in the drawer, but Alisa could no longer make use of her husband's wedding present. That is, theoretically she could. Sometime . . . when the circumstances were ripe . . . ♦

(Translated, from the Russian, by Richard Pevear and Larissa Volokhonsky.)

NEWYORKER.COM
Lyudmila Ulitskaya on Russia's women.

THE CRITICS

BOOKS

FOOLED AGAIN

What can we learn from the strategies of deception in the animal world?

BY ELIZABETH KOLBERT

On April 20, 1848, Alfred Russel Wallace and Henry Walter Bates set off for the Amazon on a boat named Mischief. The two young men—Bates was twenty-three, Wallace twenty-five—had met a few years earlier, probably at a library in Leicester, in England's East Midlands. Both were passionate naturalists, and both were strapped for cash. (Neither had been able to afford university.) To finance their adventures, they planned to ship specimens back to London, where they could be sold to wealthy collectors.

For reasons that no one has ever been able to explain—but that many have speculated about—Wallace and Bates separated soon after they reached Brazil. In the decade that followed, Wallace amassed an immense trove of new species; lost most of them in a ship fire; set off again, for Southeast Asia; and, with Charles Darwin, discovered natural selection.

Bates, meanwhile, remained in Brazil. He sailed up the Tapajós, an Amazon tributary, and then up the Cupari, a tributary of the Tapajós. Travel in the region was often agonizingly slow; to get from the town of Óbidos to Manaus, a journey of less than four hundred miles, took him nine weeks. (At some point during the trip, he was robbed of most of the money he was carrying.) Bates would find a congenial town and spend months, even years, there, making daily forays into the surrounding rain forest. He tromped around in a checked shirt and denim pants, an outfit considered outré by the British merchants he encountered in Brazil, who wore their top hats rain or shine.

As a collector, Bates was primarily interested in insects, of which there seemed to be a nearly limitless variety. Just in the area around Tefé, a town a few hundred miles upriver of Manaus, he discovered three thousand species of beetle. Bates would rise with the sun, spend five or six hours in the field, and then work until dark preparing and labelling what he had caught. He kept meticulous records—notebooks filled with descriptions of the animals' body type, preferred habitat, and behavior, often accompanied by delicate watercolor drawings.

Assessing his specimens, Bates came to notice something curious. Some of the butterflies he had netted, which had appeared more or less identical while flitting through the forest, turned out, when pinned and examined closely, to belong to entirely different families. This was the case not just with one pair of lookalikes but with several. Careful study of the doppelgängers revealed an intriguing pattern. Members of one species in the pair usually gave off a strange odor; Bates surmised that these butterflies were probably unpalatable.

By the time Bates returned to England, in the summer of 1859, both Wallace and Darwin had published their earliest papers on evolution. Bates was an instant convert. The new theory allowed him to explain what he had seen. The impostor species, he decided, had, under the pressure of natural selection, evolved to look like the noxious ones. In this way, the nontoxic butterflies gained protection from predators.

Bates laid out his ideas in a paper that he delivered to the Linnean Society, in London. Though the officers of the society weren't especially interested in the phenomenon he described, Darwin immediately recognized its significance. "I cordially congratulate you on your first great work," he wrote to Bates in 1862. The imitation of a harmful species by a harmless one has since become known as Batesian mimicry.

Lixing Sun relates an abbreviated version of Bates's story in his new book, "The Liars of Nature and the Nature of Liars" (Princeton). Sun, a professor of animal behavior and biology at Central Washington University, is, like Bates, fascinated by fraud. It can be found, he says, at all levels of "the biological hierarchy, from the most complex organisms to the least sophisticated." And this is all for the best. Cheating is a driving force in the history of life—"a powerful catalyst for the creation of diversity, complexity, and even beauty."

Sun devotes the first half of his book to a sort of biological "FBI: Most Wanted." One of the slyest, or at least most studied, of nature's scam artists is the Alcon blue, a lovely, silvery butterfly native to Europe and Central Asia. Female Alcon blues lay their eggs on gentians. The caterpillars that emerge feed on the plants until they have completed three molts. Then, as what is known as fourth instars, they drop to the ground and wait for a passing ant.

To identify their kin, ants rely on chemicals called cuticular hydrocarbons. Alcon-blue caterpillars secrete chemicals that are similar enough that ants are tricked into carrying them home. Once inside the nest, the butterfly larvae are

ABOVE: ANTONIO GIOVANNI PINNA

Whether to ward off predators or to exploit their victims, creatures can gain advantages by posing as different creatures.

ILLUSTRATION BY LOU BENESCH

nurtured by their formic friends, who feed them as if they were their own. Research by British and Italian scientists shows that the caterpillars employ an additional ruse. They vibrate to produce a sound that ants normally associate with their queen. Alcon-blue butterflies can be such convincing cons that ants will neglect their own larvae to care for them.

Many species employ similar tactics, a practice known as brood parasitism or, depending on the details, kleptoparasitism. In the insect world, these include cuckoo bees, cuckoo bumblebees, and cuckoo wasps. Among birds, several species of cuckoo, several species of cowbird, some finches, and even some ducks slip their eggs into other birds' nests. Not infrequently, the interlopers go so far as to kill off their adoptive siblings. The chicks of the greater honeyguide, a brood parasite native to Africa, have special barbs at the end of their beaks just so they can murder their nest mates.

As parenting strategies go, brood parasitism is ugly. Clearly, it is also effective: it has evolved independently many times, in several different orders. Sun, for his part, refuses to cast aspersions. "Evolution is not a Socratic philosopher," he writes.

Another grift common in nature is aggressive mimicry, which is pretty much Batesian mimicry in reverse. Instead of masquerading as a dangerous creature, an aggressive mimic poses as one that's benign. The Australian death adder spends most of its days hidden in leaf litter, often with only the tip of its tail exposed. It wiggles the tip in a movement that looks just like the writhing of a worm. When an unsuspecting lizard takes the bait, the death adder strikes. (As its name suggests, the death adder is one of the world's most venomous reptiles.)

The bluestriped fangblenny is a color-shifting fish that lives in the Indian and Pacific Oceans. Fangblennies hang out around so-called cleaner fish; the latter make their living eating parasites and other types of gunk that build up on the scales of larger fish. The relationship between cleaners and their "clients" is mutually beneficial: the smaller fish get a meal; the larger get rid of a nuisance. Young fangblennies assume the coloration of a cleaner fish; then, once a client draws near, the fangblennies remove not gunk but a chunk of the fish's flesh. As Martin Stevens, an ecologist at the University of Exeter and the author of "Cheats and Deceits" (2016), points out, "Fangblennies are not only costly to the fish they attack, but also to the real cleaner fish." Client fish naturally grow wary once they've been bitten. Sun compares fangblennies, not unadmiringly, it seems, to "gangsters running a racket."

"It's funny how people suddenly come out of the woodwork when they know you're taken."

Sun is given to punchy pronouncements. There are, he claims, two "laws" of cheating in the animal kingdom, by which he appears to mean two basic methods of deception. In one, an animal exploits another animal's cognitive weaknesses. Batesian mimicry falls into this category: the strategy works because potential predators either can't see well enough or lack the wherewithal to distinguish a poisonous butterfly from its double. Brood parasites, too, take advantage of their victims' cognitive limitations. Birds, it turns out, have poor egg-recognition skills—in some cases, almost comically poor. In one of a series of famous experiments, the Dutch animal-behavior expert Niko Tinbergen showed that a greylag goose, when faced with a choice between rescuing its own egg and rescuing a volleyball, would pick the ball. "To exploit the cognitive loopholes of another species, you only need a good enough disguise to fool your target," Sun observes. "Often a very crude mimic will suffice."

The other way that animals cheat, in Sun's schema, is by issuing false information, or, more plainly, by lying. Many animals (and even plants) communicate with one another; this is often a critical survival skill. But the possibility of communication inevitably opens up the possibility of miscommunication. Crows, for example, issue alarm calls to alert other crows to potential danger. Conniving corvids, according to Sun, "cry wolf" to scare their neighbors from food. Formosan squirrels also issue alarm calls: during mating season, sneaky males squeak out alarms to distract competitors.

Sex, Sun observes, is fertile ground for deception. Male fireflies from the genus *Photinus* flash to attract mates. If females are interested, they flash back. Females from the genus *Photuris* mimic *Photinus* females' flashes; then, when males get close enough, they eat them. (*Photuris* females have become known as the firefly "femmes fatales.") Some male garter snakes emit faux female pheromones; by confusing their rivals, they increase their chances of scoring.

Blister beetles belonging to the species *Meloe franciscanus*, in the American West, practice an elaborate, sex-dependent form of kleptoparasitism. Newly hatched *Meloe franciscanus* larvae hang out together in clumps and collectively emit chemicals that attract male bees. When a male tries to mate with the clump, the larvae attach themselves to his back with special hooks on their feet. If the male is later lucky enough to find an actual mate, the larvae relocate to her back, hitch a ride to her nest, consume the pollen she has gathered, and, for good measure, eat her young.

Frauds like those perpetrated by femme-fatale fireflies and kleptoparasitic beetles obviously take a heavy toll on their victims. This is precisely why, Sun contends, deception is such a powerful evolutionary force. The cheated are under heavy selective pressure to outwit the cheaters, who then come under heavy pressure to refine their techniques. The choice is innovate or die.

Consider the case of the superb fairy wren, a small, sweet-looking bird native to Australia. Horsfield's bronze cuckoos—also small and sweet-looking—frequently parasitize fairy wrens' nests. Fairy-wren moms, it seems, have come up with a musical defense: they sing a special tune to their chicks while they're still in their shells. The mother birds repeat the tune until their chicks are ready to hatch, which is around the time when the bronze cuckoos swoop down to deposit their eggs. Once the fairy-wren chicks emerge, they incorporate the notes their mother has taught them into their begging call. The cuckoo chicks, either ignorant of the melodic password or unable to mimic it, get fed less, or sometimes not at all.

"Cheating schemes spark countermoves, which in turn beget counter-counter-cheating maneuvers, ad infinitum," Sun writes. "In the process, a theoretically infinite number of tactics will be contrived."

When it comes to scheming, of course, one species far outstrips the rest. In the second half of "The Liars of Nature," Sun turns his attention to dishonesty among *Homo sapiens*. As a case study, he draws on the life of Frank Abagnale, whose autobiography, "Catch Me If You Can," served as the basis for the Steven Spielberg movie of the same name.

By his own account, Abagnale's career as a con artist began in the mid-nineteen-sixties, when, as a teen-ager, he ran away from home. Straightaway, he altered his driver's license, to make himself ten years older, and started kiting checks. Soon he moved on to more elaborate scams. He got hold of a uniform and posed as a Pan Am pilot, a ruse that enabled to him to fly around the country free and to cash forged checks stamped with the airline's logo. In what was perhaps his most imaginative exploit, he visited the University of Arizona and convinced some comely coeds that he was there to recruit stewardesses. He and his "recruits" then spent the summer swanning around Europe on bilked funds.

Sun invites us to regard Abagnale much as we would a bluestriped fangblenny. "Despite their high level of sophistication, Abagnale's tactics fell squarely within the two primary methods used by animal con artists," he writes.

This claim—that the "laws" of cheating are universal—is key to "The Liars of Nature and the Nature of Liars." It's what holds the two halves of the book together and justifies the wordplay of the title. It also explains how Sun ends up as an apologist for humanity's cheating ways. Lying is in *Homo sapiens'* genes, and it has had much the same generative force as deceit in the wild. Indeed, by Sun's account, it is responsible for human culture. "Without cheating there would be no literature, art, science, technology, business, or religion—and the list goes on until it encompasses all aspects of our lives," Sun writes.

Doubtless, there are important continuities between animal and human deception. (As has been clear since Darwin and Wallace's day, humans *are* animals.) But readers of Sun's book are more likely to be struck by the differences. What's truly amazing about Horsfield's bronze cuckoos is that a female of the species needs no instruction in brood parasitism; indeed, she never gets to meet the mother who could teach her. Still, generation after generation, Horsfield's bronze cuckoos lay their eggs in other birds' nests. In fact, they can't raise their own young; this is the evolutionary price they've paid for figuring out how to trick fairy wrens. The common-Mormon butterfly—a classic Batesian mimic—lives under a similar constraint. It doesn't *choose* to resemble the toxic common-rose butterfly; this is, for better or worse, its fate. "Animal con artists" simply can't help themselves.

Among humans, the story is different. How and when we lie is determined by culture and, no less important, by individual inclination. George Santos didn't have to claim that his grandparents were Holocaust survivors, or that his mother died as a result of 9/11, or that he attended Baruch College, or that he played for the school's volleyball team, or that he worked for Goldman Sachs, or that he established a foundation, called Friends of Pets United, that rescued more than two thousand dogs and cats. Even "compulsive liars," it is understood, aren't acting out of a genuine biological compulsion.

Frank Abagnale, for his part, didn't have to turn to forgery. He opted to do this, and also, it seems, to liberally embellish his life story. As reporters have convincingly shown, many of the incidents that he recounts in "Catch Me If You Can" never took place. ("The Greatest Hoax on Earth," a 2020 book by the science journalist Alan C. Logan, is entirely devoted to debunking Abagnale's claims.) There was no recruiting of fake stewardesses and no romping with them through Europe. There were some bad checks, but no more than many other petty thieves have passed. During much of the time Abagnale claims to have been defrauding the "World's Most Experienced Airline," it appears that he was actually in prison.

Abagnale's marketing of his supposedly outrageous scams was far and away his most outrageously successful scam—not so much a cheat as a meta-cheat. (Not only did it yield a book and a hit movie; it also inspired a musical that enjoyed a brief Broadway run.) Yet Sun cites "Catch Me If You Can" as if it were a historical record. How to explain his apparent credulity? Was he actually duped by Abagnale? Or is he only pretending to be, to demonstrate his larger point about the power of deceit? Honestly, who can say? ♦

BOOKS

LONG DIVISION

How the East German novelist Brigitte Reimann electrified socialist realism.

BY JOANNA BIGGS

Reimann kept to the regime's strictures about fiction but managed to create art.

In Sally Rooney's "Beautiful World, Where Are You," Marxism is demonstrated with a plastic-wrapped sandwich in a corner shop. In Simone de Beauvoir's "The Mandarins," it is used by argumentative newspaper editors at a Christmas party. But in Brigitte Reimann's 1963 novel "Siblings" (Transit Books), newly translated into English by Lucy Jones after the uncensored manuscript was found by chance last spring, it is done in the coffee room of a coal-briquette factory. In 1959, the ruling Socialist Unity Party of the German Democratic Republic announced that its writers were to follow the "Bitterfeld Way," and spend time in industrial plants—to rub off their élitism, while bringing culture to the working man. "Grab your pen, comrade, the German socialist national culture needs you!" the not so snappy slogan went.

Reimann, the daughter of a bank clerk from a family of Cologne burghers, had decided to become a writer at the age of fourteen, when she was recovering from polio. At seventeen, she published her first book of plays; at twenty, she married a machine fitter, gave birth to a child who died the same day, and attempted suicide not long afterward. By the age of twenty-seven, she'd been a member of the G.D.R. writers' union for four years and had written some promising novellas while teaching to make ends meet. In 1960, she heeded the Party's call. Having divorced her husband (the first of four), she moved to a remote town in Saxony in order to work at a coal-production plant. There, with her lover, a fellow-writer, she both worked on the factory floor and organized a cultural brigade among the other laborers, reading them her stories and teaching them to write their own. That was the Bitterfeld Way.

She went partly to solve her money troubles, and partly because it was an "adventure": it wasn't as if she believed that the state knew what it was doing when it came to literature. Hardly any good books, she wrote in her diary, had been published for years: "Opportunists and numbskulls everywhere. The only subject worth discussing in a novel, it seems, is the need to increase work productivity. . . . Human problems are not in vogue." But the novels she conceived while attached to the factory—"Ankunft im Alltag" (1961), "Die Geschwister," or "Siblings" (1963), and "Franziska Linkerhand" (1974)—are full of human beings with problems who just happen to work in factories or shipyards. She kept to the rules of what could be published in the G.D.R.: only "positive heroes," no unhappy endings, some part set in a factory, and the whole vetted by the state's publishing arm. Yet she managed to bring to life the intoxicating, impossible allure of living your ideals.

In her lifetime, Reimann won the Heinrich Mann Prize; her last, unfinished novel, "Franziska Linkerhand," published after her death, from cancer, at thirty-nine, was a cult hit, charting the protagonist's increasing disillusionment with love, work, and the G.D.R. itself, which mirrored Reimann's own. (Its publication reflected the short-lived "no taboos" period of cultural permissiveness that Erich Honecker introduced after taking power.) But for years Reimann's writing languished; it didn't connect with feminist traditions, like that of her friend Christa Wolf, or form part of a postwar reckoning, like that of her idol Anna Seghers. In Germany, Reimann was until recently perhaps best known for being played by Martina Gedeck in "Hungry for Life," a bio-pic based on her sex-filled, anguished diaries, which began appearing in increasingly complete editions, in both East and West Germany, starting in 1983. Among German readers, the diaries have become prized for their clear-eyed account of life in the G.D.R. and for their vivid portrait of a young

ILLUSTRATION BY TINA BERNING

woman artist as both seducer and seduced. This year, half a century after Reimann's death, her books have been reissued in Germany in the kind of pastel colors that you might find on a recent Prada catwalk. Human problems are back in vogue.

"Siblings" is set just after Easter, 1960, when Reimann's heroine, the twenty-four-year-old painter Elisabeth Arendt, is trying to persuade her brother Uli not to leave for the West. (The Berlin Wall didn't officially go up until August 13, 1961, but it effectively existed, if only in the mind, well before then.) Two Easters before, Elisabeth's elder brother, Konrad, had come into her room to say goodbye; on hearing the "unfamiliar, faltering" tone of her mother's *auf Wiedersehen* she realized that her brother wouldn't be back. Konrad confesses his "traitor complex" in letters from a transit camp in West Germany, but the extent of his ideological break with the family is made clear when Elisabeth and her mother go to see him after he is established in the West. He invites them to dine at the upscale hotel Kempinski's. Konrad accuses Elisabeth of romanticism when she talks about her job leading a circle of worker-painters at the local factory; Elisabeth confronts him with the family's view that he is a crook for letting East Germany pay for his studies only to take his engineering skills to the West. They can't even agree on whether the G.D.R. is a state:

> "Don't call it 'the Zone,' " I said. "It's the GDR. I don't say 'West Zone.' That's the least level of respect for our state you can show."
>
> "*State*," hissed Konrad. "A few square kilometres of impoverished countryside. A government propped up by the Soviets."
>
> We looked at each other across the table, a fast, sharp, cold look that pierced the well-intentioned appearance of family harmony. "You lived here, didn't you?" I shouted. "You should know better."

In a disarmingly direct style, alive with dialogue and detail, Reimann connects the contradictions of the G.D.R. with the legacy of the Third Reich—those zones, or sectors, were created by the Allies in May, 1945—rather than whitewashing what it was like to forge a new society out of war-damaged shards.

When the siblings' mother begs them to stop arguing, Elisabeth leaves the restaurant, crying "without tears" until she reaches the border: "It was then that I understood what 'divided Germany' meant." So she wants no more division; she never wants to hear her mother's faltering tone again, or to see another brother walk out of her life. Uli, who is twenty-five and a recently graduated engineer, has been blacklisted for having worked for a professor who fled to the West. What future can he have in the G.D.R.? When he tells Elisabeth of his decision to leave, she has two days to stop him. Her means of persuasion are limited, but she has resources: her closeness to her favorite brother; her knowledge of their childhood during the war and its aftermath; her boyfriend, Joachim Steinbrink, who, at twenty-eight, is the manager of the brown-coal plant where she works; and, not least, the evergreen ideal of a state that takes from each according to her ability and gives to each according to her need.

Reimann's own brother Lutz, the closest to her in age, left for the West with his wife and child in April, 1960. "I am very sad," she wrote in her diary, recently published in a two-volume abridged but unexpurgated English edition by Seagull Books, translated by Lucy Jones and Steph Morris. Lutz was a "muddle-head," whose actions she condemned "in principle," but he was her brother. "I love him, we have got on well for many years," she wrote. She immediately saw the story's potential as art: "Families torn apart, conflicts between brothers and sisters—what a literary subject! Why doesn't anyone tackle it, why doesn't anyone write a topical book? Fear? Inability? I don't know." She would do it, and the resulting novel would be "the way things should have gone but didn't." Reimann borrowed her remaining brother's name, Uli, for Elisabeth's wavering sibling, and put lines from her correspondence with Lutz—"And I have some traitor complexes, as they call them"—into Konrad's letters. (Lutz was angry about the finished novel; Uli and Reimann's youngest sister, Dorli, were enthusiastic.)

"For every writer, work is a self-examination," Reimann wrote in her diary, in December, 1959, "and it seems that precisely therein lies the art: to

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make this self-examination universally interesting and accessible to the widest possible readership." Reimann was not an apparatchik; she was as curious about capturing her own experience as any artist, but she did not have the freedom to write as she chose. She didn't even get to choose her genre.

Socialist realism has long been considered kitschy, compromised both politically and aesthetically. Art made under these conditions invites mockery: can good novels be written under the scrutiny of a Suslov? But Reimann's work shows that they can. As she noticed at the time, there was a compliment hidden in the state's demand that its writers build a new canon of socialist literature. Party officials believed that it mattered who appeared in novels, how they were written, and how they ended. Reimann's talent was identified and put to work: she was given a stipend from the writers' union and book contracts from the state's publishing houses, and asked to run the workers' writing circle at the briquette factory. Still, she never joined the Party, and she grew ever more disaffected with the state. Even in the early nineteen-sixties, she wrote about the pressure exerted by the Stasi, the temptations of the neon-lit West, and life in a regime that valued loyalty above talent. Reading "Siblings," one can feel nostalgic for a society that believed art mattered.

Within the three-day frame of "Siblings," Reimann brings the past so close that it barely feels past. Elisabeth recalls the Meissen figurines that her mother sold to buy food after the war; the friend who attempted to lure her to the West with rare paperbacks and French lipstick; and the story, told to inspire her weary brother, of her tangle with an older painter, Ohm Heiners, who was also in residence at the coal plant. Elisabeth's clash with an artist of the previous generation is the tour de force of the book, combining arguments about the value of art, what sort of restitution should be made for those who suffered under Hitler, and the ways in which the new state ought to care for its workers. The section worried the authorities, who attempted, without success, to cut it before publication. During the editing of "Siblings" in 1962, Reimann accepted some small excisions but fought fiercely against major ones. (In 1968, though, she revised the book herself.) For this 2023 publication, the German editors Angela Drescher and Nele Holdack used a draft of the first five chapters found during renovations to the apartment where Reimann lived when she worked at the coal factory, giving us an exceptionally complete version of the novel.

The dispute begins in the factory's coffee room. Heiners asks Elisabeth what she thinks of a painting of his that hangs in the canteen, and she decides that it would be cowardly not to be honest. "It's a bad painting," she says. "You've painted some brainless factory worker . . . I know this man. But he looks nothing like your sinister robot." Heiners explodes, attempting to discredit Elisabeth by calling her a lowlife bourgeois whose father was a journalist under Hitler. When Heiners, who was banned from painting by the Nazis, visits her studio a few days later, apparently to smooth things over, the argument continues. A worker would laugh at the depiction of an acetylene flame in one of her paintings, Heiners maintains. "My eye isn't a lens, and I'm not a camera," she says. "I'm a person with feelings and a relationship to the people I paint, and they also have feelings and their own attitude to life, work and their families, and all of this has to come across in a portrait, all of the layers, not just a flat surface." In response, Heiners tells her to get off her high horse.

One problem in the creation of a new East German canon was the lack of antecedents. History had started in 1949, when the G.D.R. was established, so there wasn't much to work with. The eminent critic and Marxist theorist György Lukács found a way around this: he argued that the great bourgeois novelists—including Balzac, Stendhal, Fontane, and Zola—had captured the irresolvable contradictions in capitalist society, and so revealed that it must fall. Reimann's favorite of these writers was Stendhal, whom she refers to over and over, and never stopped reading. In Elisabeth's "I' m not a camera" speech, there is a plea for a distinct sort of realism, one with a keen respect for the artist's own way of looking at things, a realism with the freedom to come close to subjectivism.

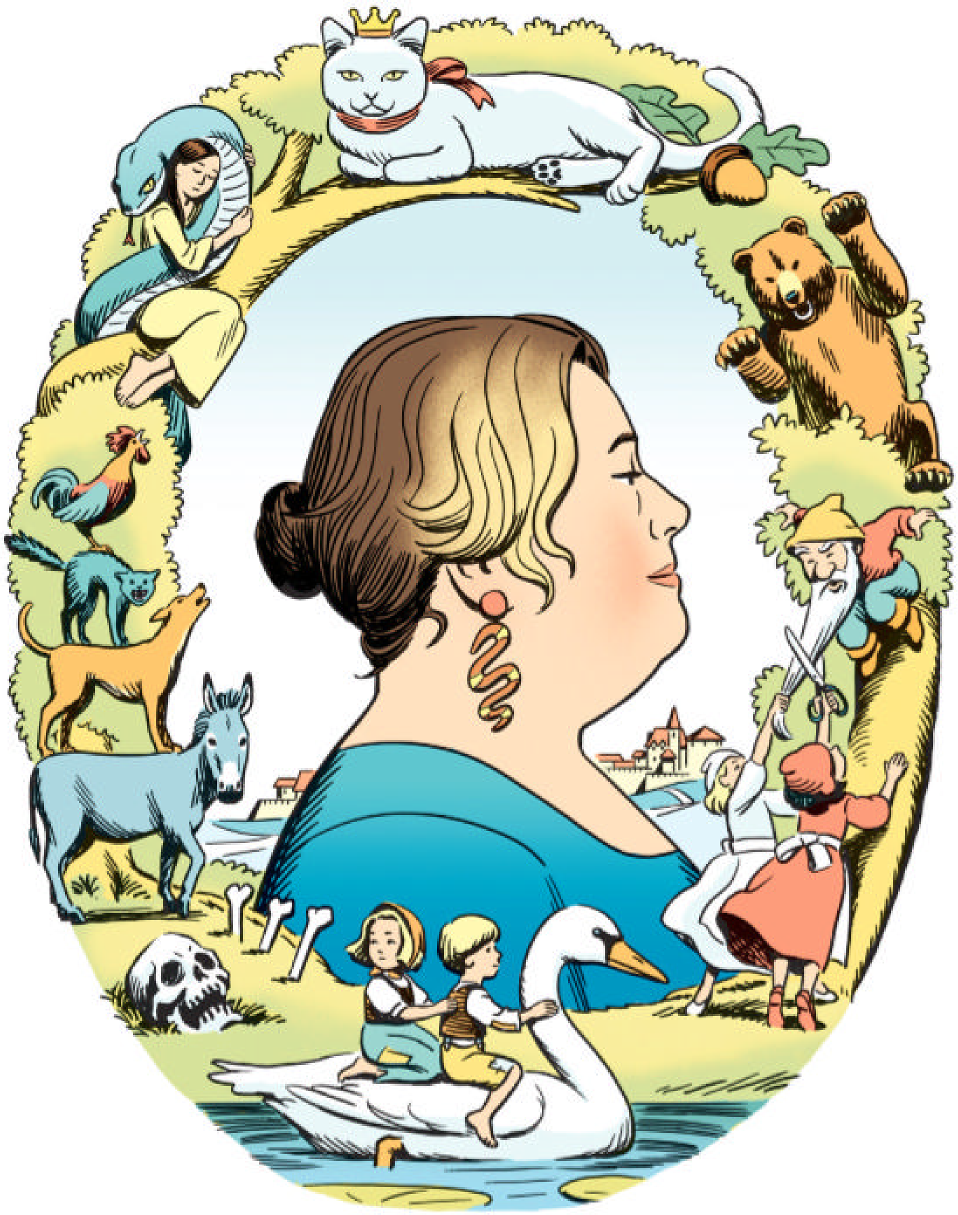
Unable to win the aesthetic argument, Heiners employs dirtier tactics. He starts rumors that Elisabeth is sleeping with members of her painting circle; one worker sees an opportunity, turning up in her studio and grabbing her as if she'd asked for it. Heiners also tells his friends in the Party about Elisabeth's views on painting, which prompts a visit from State Security. "It's been alleged that you have formed a bourgeois faction within your circle," the Stasi man says, offering her a cigarette and noticing her shaking hands. "We should have an official sit-down." (The authorities had initially wanted to suppress this scene, too.) Elisabeth decides to fight back. The way to address the rumors, she thinks, is to speak with Bergemann, the local Party secretary. She goes to his apartment late at night to give her account of what happened and finds "Anna Karenina" and "The Magic Mountain" lying around and a self-portrait by Henri Rousseau on the wall. "Wonderfully encouraged" by Rousseau's bearded face, she suddenly knows how she can persuade Bergemann. She shows him the portraits she's made of the workers in the plant. "I don't know enough about painting," Bergemann says, looking at hers, "but I can say this: it is useful, it is beautiful, and I like it. . . . Art is about putting across the essence of things, in my opinion." When Heiners is confronted with what he's done, behind a leather-upholstered door in the Party secretary's office, he throws his Party membership card across the desk and leaves his post at the factory.

That fictional leather-upholstered door is of a piece with other memorable objects from the G.D.R. At the offices of the Minister for State Security in Berlin, now preserved as a museum, you can see three telephones sitting on a wooden desk, as if still waiting to pass on rumors that could get a person killed. In Leipzig's Runde Ecke, the Stasi's East German HQ, you'll find a machine designed to cross-shred files and mix them with glue, producing rough gray bricks that rendered their raw material forever unreadable. Among so many losses—a brother, a future, an ideology—Reimann's "Siblings" has somehow survived, an unlikely patch of political, personal, and aesthetic freedom. ♦

THE STORY GOES

The shape-shifting fictions of Kelly Link.

BY KRISTEN ROUPENIAN



Kelly Link is a writer whose work is easy to revere and difficult to explain. She began her career by publishing stories in sci-fi and fantasy magazines in the mid-nineteen-nineties, just when the boundary between genre fiction and the literary mainstream was beginning to erode, and, in the years since, her work has served to speed that erosion along. Thirty years into her career, she has received a formidable procession of prizes awarded to genre-fiction writers: the Nebula Award, the Hugo Award, and the Bram Stoker Award, to name just a few. More recently, she has begun to reap the accolades of the literary mainstream: in 2016, her collection "Get in Trouble" was a Pulitzer Prize finalist, and in 2018 she received a MacArthur, for "pushing the boundaries of literary fiction in works that combine the surreal and fantastical with the concerns and emotional realism of contemporary life." Through it all, the essential qualities of her work have remained unchanged. To those familiar with her writing, "Linkian" is as distinct an adjective as "Lynchian," signifying a stylistic blend of ingenuousness and sophistication, bright flashes of humor alongside dark currents of unease, and a deep engagement with genre tropes that comes off as both sincere and subversive.

Link's stories have garnered a dizzying array of labels, from Y.A. to weird fiction, slipstream to steampunk, but the one that has clung most persistently is fairy tale. Although her new collection, "White Cat, Black Dog" (Random House), is the first of Link's books to present itself as a collection of fairy tales, she has always drawn from the language, symbolism, and rhythm of the genre. The first line of her first published story reads, "Tell me which you could sooner do without, love or water," boldly staking its claim to a position in a long lineage of folklore about impossible choices. Yet that same story also features a character who runs around a library shouting, "Stupid book, stupid, useless, stupid, know-nothing books. . . . I'm just tired of reading stupid books about books about books," suggesting a certain ambivalence toward inherited literary forms.

To say that the stories in "White Cat, Black Dog" are influenced by fairy tales isn't to say very much; they're influenced by a vast pool of intertextual allusion that includes superhero movies and Icelandic legends, academic discourse, and the work of Shirley Jackson, Lucy Clifford, and William Shakespeare. Few stories in the new collection can truly be said to reinterpret existing tales. One that does is "The White Cat's Divorce," which transposes a French tale called "The White Cat" to Colorado, where weed is legal, and replaces a tyrannical king with a Jeff Bezos-esque billionaire, but otherwise stays in the vicinity of the original. Most of the stories, though, are more loosely wrapped around the tales that supposedly inspired them. Were it not for the label "(Hansel and Gretel)" beneath the title "The Game of Smash and Recovery," few readers would connect that tale with Link's story of spaceships, robots, and vampires. More than anything, the aim of producing "reinvented fairy tales," in the publisher's formulation, seems like such an *obvious* account of what the stories are doing that those familiar with the author's work will be put on guard. To read Link is to place oneself in the hands of an expert illusionist, entering a world where nothing is ever quite what it seems.

One thing that fairy tales teach us, of course, is that it's wise not to examine such magic too closely—better to accept the gift gratefully than to inquire into its provenance. Still, at the risk of incurring the magician's wrath, we might

In Link's hands, genre is elastic—and nothing is ever quite what it seems.

ILLUSTRATION BY R. KIKUO JOHNSON

look more closely at one of these stories and see if we can figure out how it works. "Prince Hat Underground" is the second story in the new collection, and the only one that's previously unpublished. It begins in a very un-fairy-tale-like fashion, in medias res: "And who, exactly, is Prince Hat?" This isn't as familiar an opening as "Once upon a time," but it does point down a well-trodden path in literary fiction—that is, toward a character portrait. "Gary, who has lived with Prince Hat for over three decades, still sometimes wonders," Link continues. And so the plot becomes even more familiar: this is the story of a marriage, and, more particularly, a story of the secrets that persist even in long-term relationships. Already we have, in two lines, a thumbnail sketch of this relationship, between staid, reliable Gary and the boyish, fanciful Prince Hat.

But then the third line dodges and spins: "First of all, who has a name like that?" In other words, what kind of a story is this? A story in which it's normal for people to have names like Prince Hat—that is, a fairy tale? A story in which "Prince Hat" can only be a nickname—that is, a realist one? Or is it a story in which some characters have ridiculous names like Prince Hat, but other characters, characters with names like Gary, are going to react the way an ordinary person would: What kind of a name is that? That space, in which readers ricochet between layers of reality, is the realm of Kelly Link.

There's a whole subgenre of fiction, to be sure, in which characters from stories encounter "people" in the "real world." (Think of the novel "The Eyre Affair" or the TV show "Once Upon a Time.") This usually prompts little more than a laugh of surprise before the rules of the new reality coalesce. But the next line of "Prince Hat Underground" sets a different course: " 'Unfair,' Prince Hat says. 'I didn't name myself.' " The story now bounces into metafiction. (Who names characters? The author, of course.) Then it somersaults back again, as Prince Hat continues to remonstrate: "And Gary is equally ridiculous. Gary's not even a word. Well, 'garish,' I suppose." Here, Prince Hat, as a character from a fairy tale, is doing his job of finding the magic ("garish") in the mundane (Gary). This kind of teasing is also what the fanciful partners in long-term relationships, the Prince Hats, do for their Garys, so the story holds its own as a portrait of a marriage. And yet this kind of defamiliarization via close attention to language is also a habit associated with literary fiction. Gary/garish points to context and contrast, the ungarishness of the name Gary. It's not the kind of joke you would find in a fairy tale. When Prince Hat makes it, though, he's sending up what, only a sentence ago, the reader was tempted to believe was literally true: that at least one of these people comes from a world in which names have meaning. But wait, is that the world of literary fiction, or of fairy tales?

Over the course of fifty or so pages, we watch Gary chase Prince Hat across the globe and down into the underworld, completing tasks, answering riddles, and, at the same time, unspooling the practical history of this marriage—what their friends say about them, what restaurant they used to go to for brunch. We *think* we're in familiar territory, and yet, in the periphery, the landscape grows shadowy and strange:

> Incredible to think that, for eight full months, Prince Hat was a receptionist for a renowned analyst. Analysis slides off Prince Hat like water off a duck engendered from dark matter. Out of the wreckage of one life, Prince Hat climbed into Gary's, and they have been together ever since, faithful more or less, happy more or less, a fairy tale of a romance more or less, their friends say.

That second sentence is purest Link: zero to a hundred in fourteen words, rocketing from the bourgeois activity of psychoanalysis to science-fictional absurdity through the portal of cliché, the jest serving to distract our attention from the gist of the sentence—that the quest at the heart of the story is a fool's errand. Prince Hat is unknowable. It is not just psychoanalysis but literary analysis that slides off him, because he is fundamentally alien to this world. And it is *eerie*, that image of a blank figure climbing from one life into another. What the narrator gives with one hand ("faithful," "happy," "fairy tale," "romance") she takes away with the other ("more or less," "more or less," "more or less"). But the reader remains distracted and amused—by puns and metafictional flourishes and talking snakes and literary allusions that make us feel clever, and, most of all, by the snug security blanket of genre convention. We think we're reading a fairy tale, so the seeker will find the object of his quest; we think we're reading a character portrait, which means that the subject will, in the end, be known.

We reach the last page still believing that the story will make good on its promises. Gary has descended into the underworld in pursuit of Prince Hat, found him, and brought him home again. We are given what we have been led to expect of a portrait of a marriage, too. The pair have reached a new level of understanding, after the revelation of a difficult secret, so familiar from literary short fiction that it verges on the parodic: Prince Hat is sick, with some kind of blood disorder, but he and Gary will still have a few good years. In fairy tales, marriages are threatened by enchantments; in realist short stories, they're often threatened by diseases that teach the characters to be grateful for their remaining time. Prince Hat's illness is sad, but not unbearably so; it fits within the frame. "The story is over, it's almost over," the narrator whispers. "The lovers are reunited. They fuck, they talk, they sleep. Soon they will wake. . . . The sun will come up and the dark will go away." What else do we want but for stories to end here, where everything makes sense, where suffering is bearable because we know how to give it meaning according to the rules of the genre that we're in?

In "The White Road," which follows "Prince Hat Underground," a troupe of Shakespearean actors travel through a post-apocalyptic wasteland, performing for the few survivors. Commenting on one actor's preference for comedy over tragedy, the narrator says:

> In the comedies, everything comes right and then there is a stopping place that is not a true ending. The box that gives the comic story its shape is made, on purpose, too small. It cannot contain the true ending.

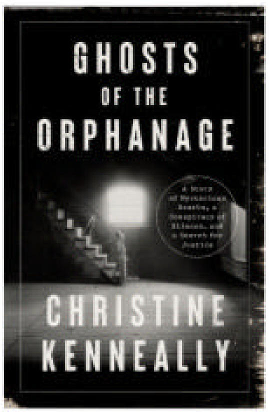
The question of where a story should begin and end is one that recurs throughout "White Cat, Black Dog," and is part of what gives the stories a melancholy air of flux and fragility. "All stories about divorce must begin some other place" is how one story starts; in the opening of another, the narrator reflects, "I have never much cared for change, but of course, change is inevitable. And not all change is catastrophic—or rather, even in the middle of catastrophic change, small good things may go on." Throughout the collection, Link suggests that *all* stories are too small boxes, and not just the ones that end with "happily ever after," or begin (as the last tale in the collection does) with "Once upon a time." But, as the narrator of "The White Road" is aware, there's no real reason to believe that the ending of a tragedy is in any meaningful sense truer than that of a comedy, or that the opening of a realist story is truer than that of a fairy tale. Stay with a comedy long enough and it will decay into tragedy. Stay longer still and we'll see the deaths of one set of characters serving as the mulch from which another set of characters—and comedies—will spring. Shakespeare, at the end of his career, abandoned both comedy and tragedy for romance, the genre of the continually renewing frame.

That's why the story of Prince Hat finally isn't a tragedy or a comedy; it's not a fairy tale of death defied or a realist portrait of a marriage cut short. It slips the net of all those constraints, proceeding inexorably past love, past death, into a penumbral afterlife, a space that is terrible and unfamiliar:

> The day will end, days must end, and the dark will come again. And eventually there will be only darkness and Gary will be alone in that darkness, paying off his debts, a bird flying with a candle in his beak. He will open up his beak and let the candle drop and cry, Oh, where is my Prince Hat? Where has Prince Hat gone?

The trapdoor opens; we plunge and tumble. What kind of story is this? Somehow, we were misled. Our attention was elsewhere. This is not the ending we expected. We are in the grip of a childlike grief. And then we turn the page and read, "All of this happened a very long time ago and so, I suppose, it has taken on the shape of a story, a made-up thing, rather than true things that happened to me and to those around me. Things I did and that others did. And so I will write it down that way. As a story." Gary and Prince Hat have dissolved into nothingness, but a new set of characters has arrived to entertain us. The magician has begun her next trick, and we're safe in the story again. ♦

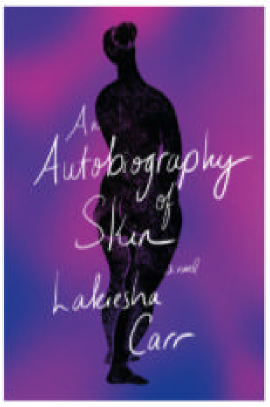
BRIEFLY NOTED



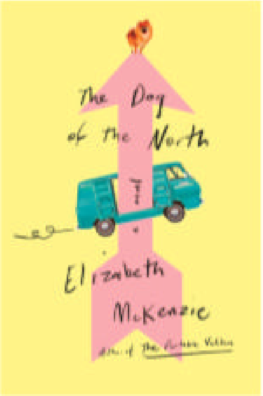
Ghosts of the Orphanage, *by Christine Kenneally (PublicAffairs).* In this investigation of abuse and murder in orphanages in North America and Australia during the mid-twentieth century, Kenneally pursues what she calls "cold cases, twice over": disappearances of children for whom official records are inaccurate or lacking, the main proof of their existence being the memories of their peers. Building her narrative on circumstantial evidence and the testimonies of survivors, Kenneally portrays an "invisible archipelago" of institutions—most, but not all, run by the Catholic Church—that, while operating independently, shared so many horrifying traits that their violence can only be termed institutionalized. The result is a gripping chronicle of the ways in which those in power ignored, or even encouraged, the ill-treatment of children across borders, cultures, and decades.

THE ABSENT MOON
A Memoir of a Short Childhood and a Long Depression
LUIZ SCHWARCZ

The Absent Moon, *by Luiz Schwarcz, translated from the Portuguese by Eric M. B. Becker (Penguin Press).* This memoir from a Brazilian author and publisher reflects on a childhood marked by the ordeal of his father, Andre, who, as a boy in Hungary, managed to jump off a train that was headed to Bergen-Belsen. Andre's father, Lajos, stayed on the train and "never returned from the camp." Schwarcz recounts how he developed an "outsize sense of responsibility for others" and tried to make his father happy, while knowing he would fail. The book's title refers to a novel Schwarcz wrote based on his father's life: it was never published, but the work he ended up writing pays haunting tribute to the man.



An Autobiography of Skin, *by Lakiesha Carr (Pantheon).* In the three narratives that make up this powerful début, Black women from Texas reckon with their complex relationships to their bodies, which are by turns deprived of sex, rendered husk-like after childbirth, and physically battered. One woman finds refuge from a loveless marriage in gambling; another is so undone by news stories of violence against Black people that she endeavors to alter her children's skin color. In the book's slow-boil closing tale, the narrator, bereft following a breakup, shares an extrasensory power with her grandmother, who says, "If we were chosen, it was only because we continued to love, despite our pain and disappointments over many lifetimes."



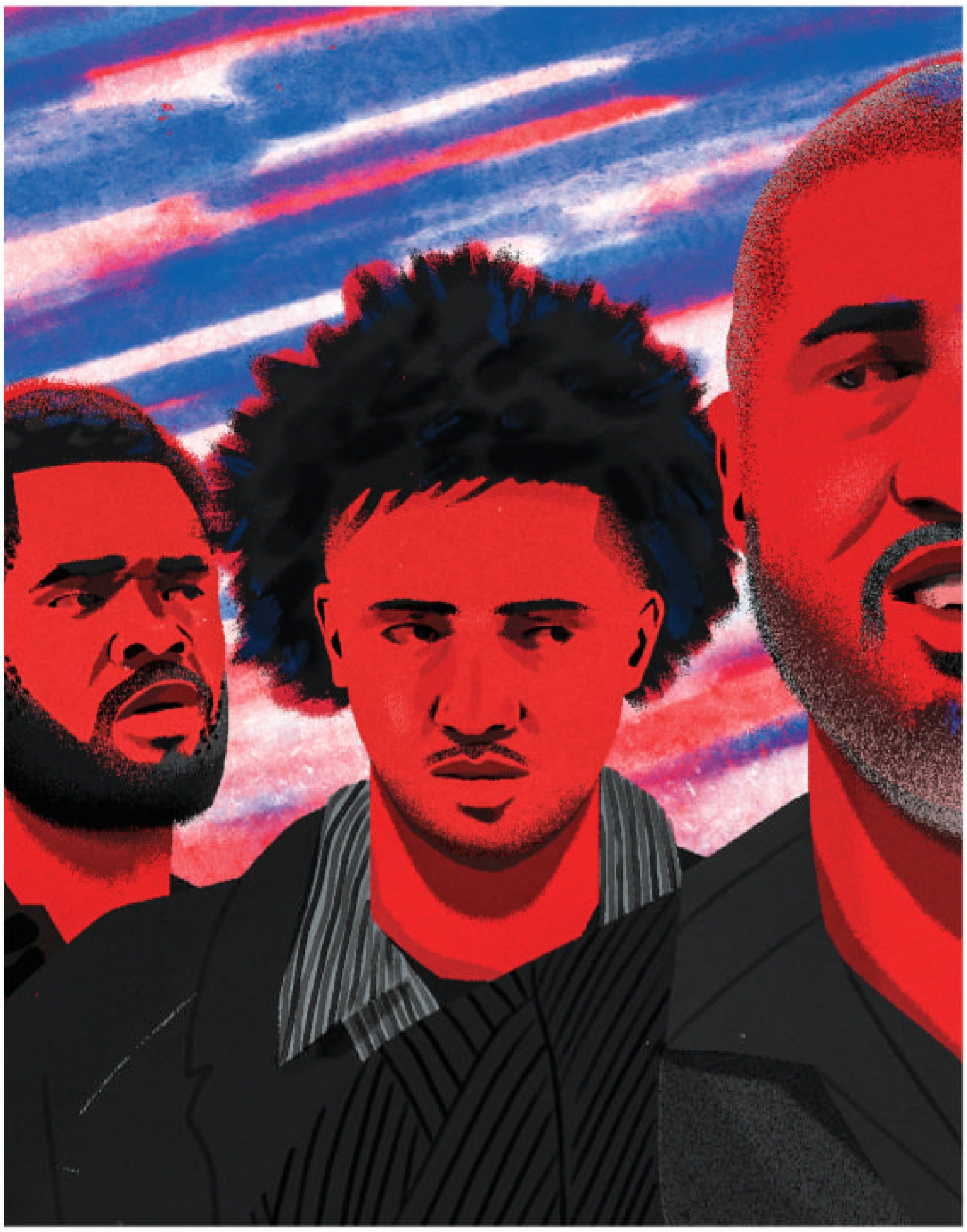
The Dog of the North, *by Elizabeth McKenzie (Penguin Press).* "I was used to being the object of anger," the down-on-her-luck narrator of this vibrant picaresque says. In her mid-thirties, she flees a dead-end job and a failing marriage, embarking on a journey that leads to a confrontation with childhood trauma. En route, she contends with her possibly homicidal grandmother; lives in a van owned by her grandmother's ailing accountant; searches for her mother and stepfather, who disappeared years earlier; eludes her abusive biological father; and kindles a promising new romance. "I seemed to be trapped in a continual reckoning between present and past," she notes. McKenzie parlays that reckoning into a vibrant novel that combines slapstick comedy with poignancy.

THE THEATRE

BLUES MEN

"Hang Time," by Zora Howard.

BY VINSON CUNNINGHAM



Three Black men hanging in midair share reminiscences and buried fears.

In terms of its words, "Hang Time," by Zora Howard, is a very subtle play. Its language is rich, and the themes that its characters usher forth chime suggestively, like harsh but precisely rung bells, never quite settling on a resolution. Its imagery, however, is awful and overt: even before the show starts, as the audience files in, three Black men are hanging in midair, their legs dangling, the motion of their bodies almost stilled. Walking into the small, dark theatre at the Flea and finding this scene is like happening upon the fresh aftermath of a crime. As the play gets going, it becomes like looking on helplessly—or, worse, passively, as a kind of entertainment—while a lynching ensues.

The stage direction in Howard's script seems to make the matter of her setting even blunter: the play takes place "underneath an old, wide tree." But in this production—directed by Howard, with scenic design by Neal Wilkinson—the actors are held up from behind by a metal contraption. No tree or other entity, living or dead, is visible above their heads. No ropes. Sometimes the men's legs are free to sway, but a black platform periodically rises to meet their feet, enabling them to stand. The lighting design, by Reza Behjat, is stylishly minimal, and makes it so that the apparatus, black and glinting steel, is often nearly unseen. Maybe this is how we carry out a warning example of a showy death in the technological age: with machinelike efficiency and an iPhone's sleek curvature and silence, leaving all those unfashionable knots and organic materials behind.

Meanwhile, the men speak. Blood (Cecil Blutcher) is a young man trying to make it, full of humor and earnest intensity. He's already had his fair share of trouble—neglectful father, sick grandmother, overworked mother, hungry siblings. But his father's wanderlust has been passed down to him, like a gene. He wants to get out of "here"—where that is, exactly, is never specified—and get on the move, go travelling. He's heard of pink rivers and red oceans, surreal locales accessible only by a yearning for adventure and an impatience with local comforts. He wants to see it all for himself.

Slim (Akron Watson) is a middle-aged trickster, the kind of crossroads-dwelling creature we associate with the blues, which, perhaps unsurprisingly, Slim loves. When he's not bragging about his sexual exploits, or giving the other guys great snowdrifts of shit, he's belting out songs. His relationship with melody is inconsistent—it's obvious that Watson can actually sing, and he sometimes strains to make himself sound bad—but his passion is unimpeachable. Little wonder: he's seen and done some terrible things. At one point, he cries out:

Have you ever loved a woman
So much you tremble in pain?
Yee-es!
Have you ever loved a woman
So much you tremble in pain?
Yee-es!

Bird (Dion Graham), the eldest and world-weariest of the trio, isn't charmed by Slim's effusion of emotion. The men's banter is typical of "Hang Time" 's method, heavy on humor until the jokes run their riverine course toward pain.

Bird: Slim.

Slim: What? Brother can't sing a little to pass the time?

Blood: Hopefully sing better than that.

Slim: Oh, you don't like my voice?

Blood: I like when people sing good.

Slim: Yeah, well, ain't supposed to be good. Supposed to be ugly.

Blood: Well, that part you got.

Bird: Ha!

ILLUSTRATION BY RAJ DHUNNA

Slim: You wouldn't know nothing about it no how.

Blood: Don't wanna know neither.

That's true: no, you really don't want to know the deep, burbling source of the blues. The kind of grief that urges you to song is inelegant, a hot devil nearly impossible to wrestle into form. The right note in that scenario—the kind of experience with which these men, in their different ways, all seem too familiar—might sound out of tune. Moving on and staying alive mean, for the most part, steering clear of that abyss. Bird, for instance, tries to counsel the younger men to settle down with a good woman and let the rhythms of a conventional life console them. "When you weary of the world, who gonna hold your head in her lap?" he pointedly asks. "Who gonna make sure you fed mind, body and spirit?"

At one point, Bird squabbles with Slim about the blues—the music is a grinding, perpetually active metaphor in "Hang Time." Slim asserts that Freddie King is the "greatest bluesman of all time." "Let's not get ahead of ourselves," Bird says. "I need to know who it is got in your head that Freddie King was ever considered to be THE King of the Blues." He argues, instead, for Muddy Waters and Robert Johnson. "Time, nigga," Slim replies. "The general populace, that's who." The dispute isn't about singers, not really. It's a thin tarp thrown over the unsayable; so is this show. Each time one of the men is forced to the brink of his deepest wounds, he starts to twitch and shake and twist at the neck. The physicality of the lynching tree comes rushing back.

So, where are these men? What kind of speech are they engaged in? They often ask each other which day of the week it is, with a touching and seemingly avoidant confusion. The play runs for only an hour, but feels dense with their reminiscences and world views, their trepidations and buried fears. They seem stuck not only by way of their unmentioned hangings but in some gray gap between life and death, between wistful retrospection and wounded involvement in the dailiness of things.

This might be a kind of Purgatory, where talk and memory and proximity to trauma are cleansing agents that, by degrees, lift the soul toward Paradise. Or it could be a final act of protest, a gabby defiance against the towering contemporary oaks from which people like these three still sometimes swing: overzealous policing, for-profit prisons, low wages, negligent medical advice, unshakable ennui. If you keep talking, they can't close the lid on your tomb. Cutting jokes and resigned complaint shield against the void.

The unchanging positioning of the three men's bodies—a closely clustered triangle, with Blood in front and Slim and Bird slightly behind, flanking him like a pair of living wings—suggests classical paintings of the Crucifixion. As the story goes—Bird would know this, as he's a God-fearing man—two thieves were hung alongside Jesus. One of them asks for a show of power: Christ should leave his cross, saving himself and the criminals. (The scornful request reminds me of some famous lines from W. H. Auden: "We who must die demand a miracle./How could the Eternal do a temporal act,/The Infinite become a finite fact.") The other, more simply, asks to be thought of: "Jesus, remember me, when you come into your kingdom." Perhaps we're all stuck between those poles: a doomed will to power over an already certain fate; a hope that memory, our unstable shadow, is the route to everlasting life.

More than anything, I thought of a funeral service, with its unfair mismatches of speech. The mourners try and fail to put a life into words: an out-of-tune blues. And the beloved's body, quiet and changed, unreal in its onstage presence, sits, unable to testify on its own behalf. But what if the dead could rise, if only for the hour or so it takes to put on a show? They might struggle to the podium and adjust the microphone and deliver their own eulogies. It's a sweet and impossible fantasy, from both angles: to see and hear the lost one last time, to speak one more word for yourself, to clarify. Maybe, though, they'd just splash back into the waters of simple conversation. What day is it? they might ask. Nice weather. ♦

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GENTLEMAN'S GAME

"Great Expectations," on Hulu.

BY INKOO KANG

Dickens gets debauched by sex, drugs, and gunfire in a new adaptation of "Great Expectations," streaming on Hulu. The six-part FX/BBC miniseries is a slice of Victoriana soaked in Red Bull which avows, too brashly at times, that it is no staid PBS affair. The British writer Steven Knight (the creator of "Peaky Blinders," who also adapted "A Christmas Carol" for television, in 2019) casts gothic and colonial shadows over the beloved bildungsroman, which follows Pip, an orphan whose aspirations to become a gentleman are bankrolled by a mysterious benefactor. In Knight's retelling, Pip learns that few fortunes are made without preying on the misfortune of others. Traditionalists will balk at the show's many departures from the novel—and, likely, at its blue-lit, try-hard edginess—but this energetic remix doesn't betray the spirit of the original. Dickens's heavy social conscience, character-driven scenes, and preposterous plotting are all deftly distilled.

Not unlike Adam and Eve becoming aware of their nakedness in the Garden of Eden, the book's Pip comes to learn shame, striving to improve his station after being humiliated for his modest background. Knight's Pip (who is played by Tom Sweet as a young teen) owes as much to Disney as he does to Dickens. A born dreamer, he is raised by his sister (Hayley Squires), who is as wicked as any fairy-tale stepmother, and her gentle blacksmith husband, Joe (Owen McDonnell). Pip is reputed to be the smartest boy in town; he recites Shakespeare to himself during the day and stays awake late into the night, watching the ships on the Thames embark for every corner of the Empire. He intends to set sail himself in just a few years, fancying a fortune in the ivory business. Of the creatures that must be sacrificed for their teeth and tusks, he seems not to spare a thought. The world expands before the boys and men of this era, and their moral imaginations can scarcely keep up.

The adaptation is best enjoyed as Pip's action-packed, visually lush descent into Hell.

Still, there's plenty of untamed terrain just beyond Pip's village. Hiding among the marshes and the mist—which the pilot's director, Brady Hood, imbues with an eerie otherworldliness—are two escapees from a prison ship: Magwitch (Johnny Harris) and Compeyson (Trystan Gravelle), mortal enemies whose convoluted history will eventually be revealed. Starving and still shackled, Magwitch sneaks up on Pip and threatens the boy into fetching him some bread and a file—an act that will prove fateful.

Shortly thereafter, Pip is summoned to the home of Miss Havisham (Olivia Colman), who is interested in him for his intellect. (As his uncle Pumblechook, played by Matt Berry, says, Pip is "an orchid growing wild in the filth of a stable.") Onscreen, as on the page, Miss Havisham is a living ghost: years after being jilted at the altar, she parades around her artfully derelict mansion in a soiled wedding dress, ranting about love's inconstancy. In the book, Dickens doesn't dwell on the origin of her family's riches (though it is implied to be based on their land holdings), whereas Knight has pointedly made the source of her generational wealth the opium and slave trades.

Under Miss Havisham's supervision, Pip is to provide company to her adopted daughter, Estella (Chloe Lea), who, in a later century, would have some doozies to tell on a therapist's couch. Though instinctively icy to Pip, Estella is happy to indulge his hopes of one

ILLUSTRATION BY DARYA SHNYKINA

day joining her caste. "A gentleman only has to observe good manners with those who are members of his own class," she informs him. "Those below are for using." Pip's ambition blinds him to the obvious inference: he, too, is being used.

The "great expectations" of the title refer to Pip's desires, which Miss Havisham initially feeds, planning to destroy them as he grows older. (Her character is an extravagantly musty addition to Colman's bestiary of regal ogresses; she's both monstrous and tragically human, wrecked by self-pity and her own wealth, which allows her to live forever in a single moment of heartbreak.) Despite their strained mother-daughter relationship, Miss Havisham and Estella (played as a young woman by Shalom Brune-Franklin) are united in their belief that Pip's social climbing cannot be achieved without a debasement of his soul. A gentleman pursues pleasures "without concern for issues of morality," they tell a newly adult Pip (Fionn Whitehead) on his eighteenth birthday. (Their gift to him is a tumble with a cheerful prostitute.) All the while, Miss Havisham encourages Pip to fall in love with Estella, scheming to deny their union as her revenge upon the male species.

The miniseries' early episodes are propelled forward by a tension: between Pip's yearning to escape the stagnancy of his sleepy village and the mounting signs that the elaborate niceties of the upper class that he finds so enchanting also deflect from an exploitative brutality. Pip is not totally without compunction; he recoils when a merchant, admiring the manacles that Joe has forged for prisoners, attempts to commission a large number of chains for "African cargo." But he's not too virtuous to take up Miss Havisham's suggestion that he sell some of her opium to purchase finer attire. Soon, Pip is whisked away to London by a lawyer named Jaggers (a charismatically foreboding, vampirically costumed Ashley Thomas, his face covered in scars), who has been hired by Pip's anonymous benefactor to assist the young man's social mobility. Jaggers only knows one way up. "I will teach you," he tells Pip, "first to be a rat, then a snake, then a vulture. Then, with blood dripping from your beak, I'll teach you how to be a gentleman." (The dialogue doesn't sound much like Dickens, but its vivid pulpiness adds to the show's propulsive pacing.)

After Miss Havisham, Jaggers—who enjoys a larger role in the show than he does in the book—is the most compelling character to watch; he alternately grimaces at and delights in putting Pip through his paces. A cautionary tale of the kind of mercenary, unstoppable force Pip would need to become to survive in London—here, a den of dung and desperation—Jaggers gradually reveals a sympathy for his rapidly deteriorating protégé. When he suggests that Pip take up opium to get through his workdays, he could be protecting what's salvageable of the young man's soul—or hastening his decline so that he may flee the city faster.

London has seldom looked less inviting; hard and stark, it recalls a chessboard, where players vie ceaselessly for dominance. The nearly monochrome palette of the city scenes reflects the series' Manichean world view of the corrupt rich and the largely kindhearted poor, most clearly embodied by Joe, as well as by Pip's childhood friend Biddy (played as a girl by Bronte Carmichael and as a young woman by Laurie Ogden). The allusions to the sins of the British Empire that Knight introduces to Pip's tale are provocative, reminding viewers where much of England's wealth in this period came from, and at whose expense. But the potency of this critique is somewhat undercut by its application to a world, so unlike our own, with few gray areas. The adaptation is best enjoyed, then, as Pip's action-packed, visually lush descent into, and eventual escape from, Hell.

Dickens wrote two endings to "Great Expectations." Knight furnishes yet another. One could nitpick at it—certainly at its feminist revisionism, which irks far more than the series' other anachronisms, such as its race-blind casting. The various updates for modern sensibilities lend unusual depth to Estella, but, as in the novel, Pip's infatuation with her never rises above a plot necessity. The driving force behind his actions is a contrivance we accept, rather than feel. But it's also to Knight's credit that his populist, crepuscular vision coheres as well as it does. He satisfyingly ties together the story's many threads, including those of the two convicts, and neatly resolves its central thematic conflicts, arguably better than the author did. This adaptation could be justifiably accused of not trusting contemporary viewers to care about Dickens's world. But pulling him into ours has yielded its own B-movie thrills. ♦

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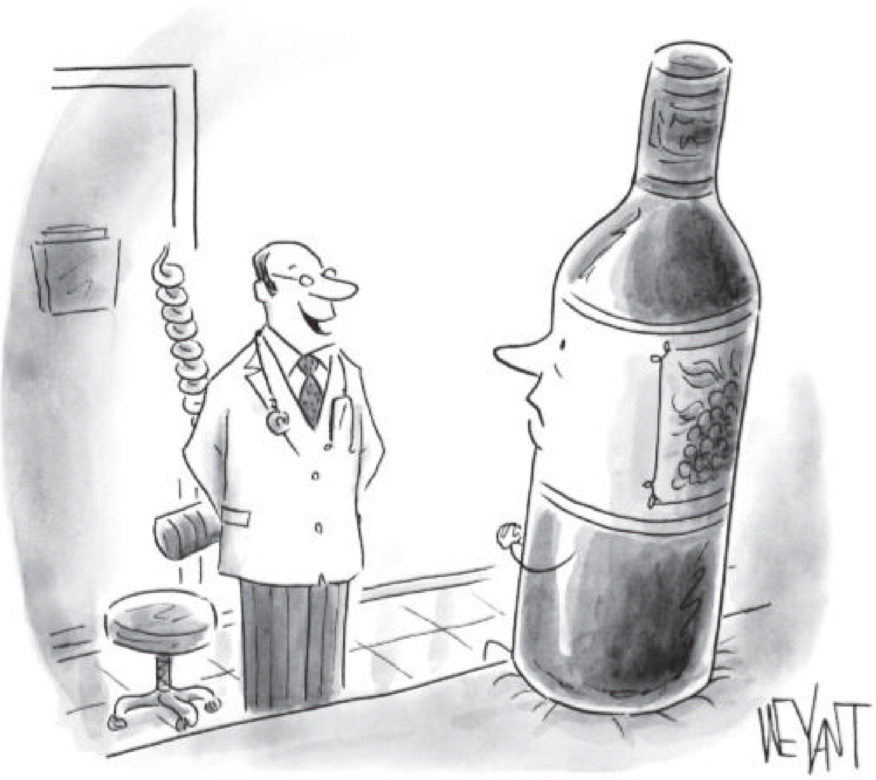
Each week, we provide a cartoon in need of a caption. You, the reader, submit a caption, we choose three finalists, and you vote for your favorite. Caption submissions for this week's cartoon, by Christopher Weyant, must be received by Sunday, April 2nd. The finalists in the March 20th contest appear below. We will announce the winner, and the finalists in this week's contest, in the April 17th issue. Anyone age thirteen or older can enter or vote. To do so, and to read the complete rules, visit contest.newyorker.com.

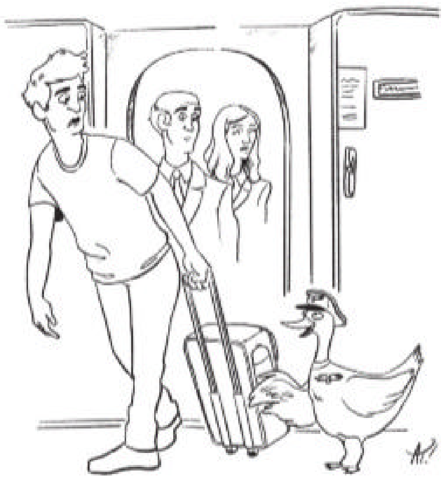
THIS WEEK'S CONTEST



“ ”

……

THE FINALISTS

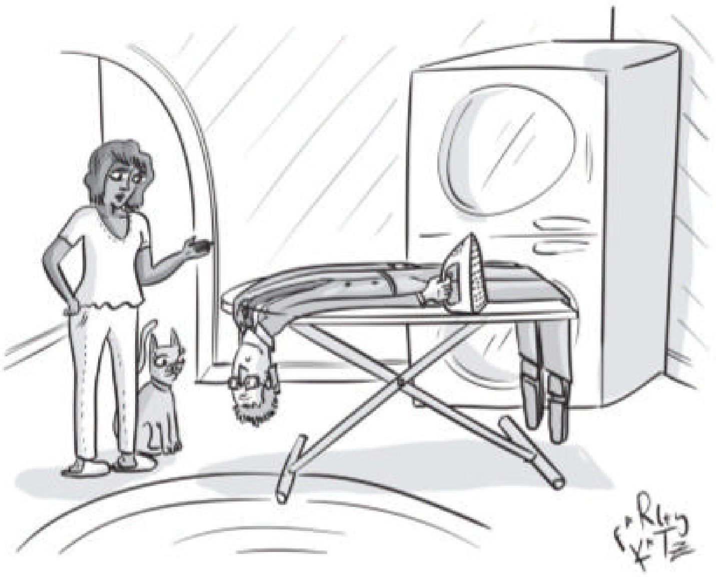


“I need a volunteer with opposable thumbs to help in the cockpit.”
David Kristjanson-Gural, Lewisburg, Pa.

“I can't fly until I get all my passengers in a row.”
Susan Sturm, Springfield, Ill.

“In the unlikely event of a water landing, I'm your guy.”
Brendan O'Meara, Eugene, Ore.

THE WINNING CAPTION



“Don't worry, I'll still love you when you have wrinkles.”
Kara Nagle, Morrisonville, Ill.

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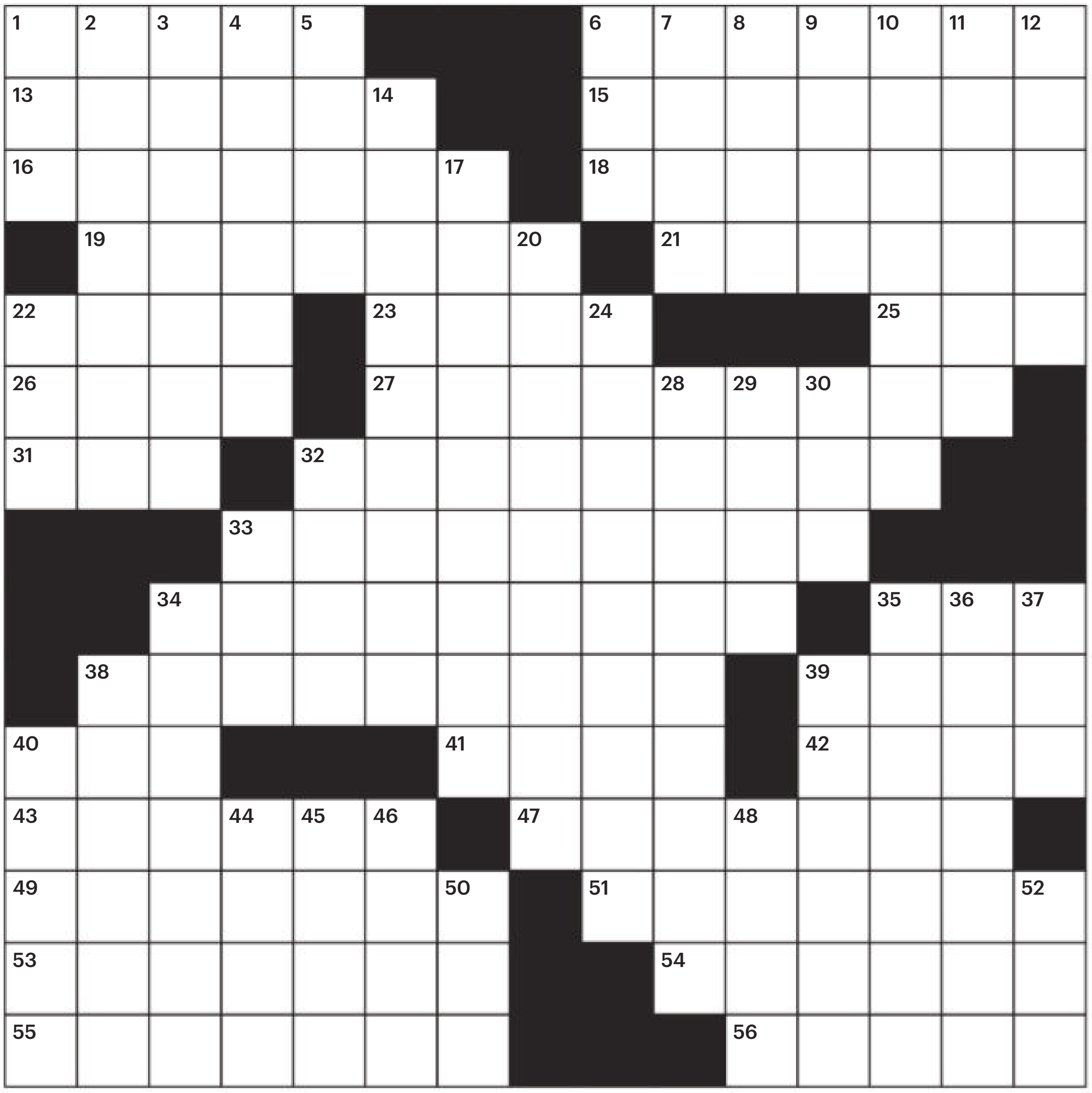
PUZZLES & GAMES DEPT.

THE CROSSWORD

A challenging puzzle.

BY WILL NEDIGER



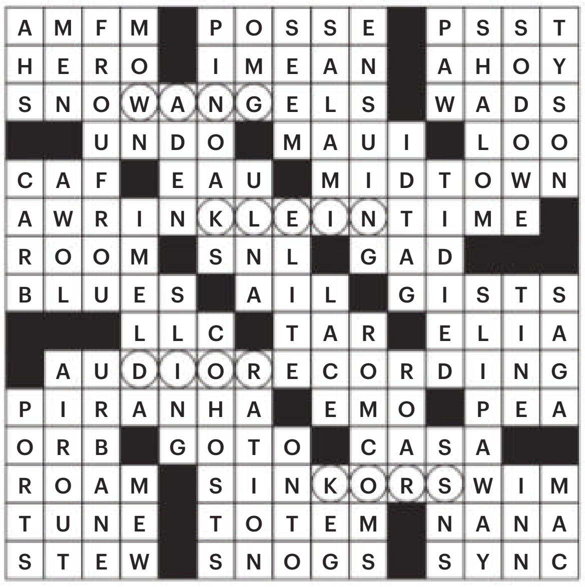
ACROSS

1 They might be checkered
6 Work with a hook
13 Draft
15 Available
16 "Bye, ___!" (dismissal originating from the movie "Friday")
18 Says "Amen to that!"
19 He forced Otto to resign in 1890
21 Item associated with both heads and tails
22 Navel part
23 Geared up?
25 Word with school or tour
26 Word in the titles of novels by Ivan Turgenev and D. H. Lawrence
27 Departing from the mainstream
31 Leaf-cutter, for one
32 Mends fences, in a way
33 Some polyamorous relationships
34 Avoids anything hard
35 They're profiled in the 33⅓ book series
38 Be fully present without casting judgment, in therapy-speak
39 Cost-cutting measure?
40 Nobel-winning economist Amartya
41 Fail to gain traction
42 Exchange D.M.s
43 The main characters of the film "The Travelling Players," e.g.
47 Many a British Prime Minister
49 Disrupt using mobile technology
51 They may be treated with Paw Patrol bandages
53 Glove compartments?
54 Digs
55 F.B.I. leader?
56 Take down a peg

DOWN

1 Acrobat output
2 Coördinator's question
3 Conspicuous
4 Patterns with diagonal ribs
5 "___ a Fun Age" (Kiley Reid novel)
6 Type of compound phased out by the Montreal Protocol
7 Search for the breast, as a newborn
8 ". . . but don't quote me on that figure"
9 Pot component
10 Tall chest of drawers
11 "A Girl's Story" author Annie
12 They're often passed in class
14 Circles at business meetings
17 Two-player two-pointers
20 Type of mushroom in Anna Lowenhaupt Tsing's "The Mushroom at the End of the World"
22 "Hey, just a heads-up"
24 Megahit whose title means "slowly"
28 Released
29 Holders of buried treasures
30 Many *JAMA* readers
32 Storage site
33 Business-card abbreviation
34 Exceedingly
35 Maui locale that was briefly the capital of the Kingdom of Hawaii
36 They're attracted to stars
37 Volleyball action
38 "Watermelon Man" composer Hancock
39 Online research resource founded by Alexandra Elbakyan
40 Effects
44 Prompt
45 Spot from which an angler's legs might dangle
46 Furman who provided music for "Sex Education"
48 Elite Eight org.
50 Class that might cover false friends, for short
52 Opposite of NNW

Solution to the previous puzzle:



A	M	F	M	■	P	O	S	S	E	■	P	S	S	T
H	E	R	O	■	I	M	E	A	N	■	A	H	O	Y
S	N	O	W	A	N	G	E	L	S	■	W	A	D	S
■	■	U	N	D	O	■	M	A	U	I	■	L	O	O
C	A	F	■	E	A	U	■	M	I	D	T	O	W	N
A	W	R	I	N	K	L	E	I	N	T	I	M	E	■
R	O	O	M	■	S	N	L	■	G	A	D	■	■	■
B	L	U	E	S	■	A	I	L	■	G	I	S	T	S
■	■	■	L	L	C	■	T	A	R	■	E	L	I	A
■	A	U	D	I	O	R	E	C	O	R	D	I	N	G
P	I	R	A	N	H	A	■	E	M	O	■	P	E	A
O	R	B	■	G	O	T	O	■	C	A	S	A	■	■
R	O	A	M	■	S	I	N	K	O	R	S	W	I	M
T	U	N	E	■	T	O	T	E	M	■	N	A	N	A
S	T	E	W	■	S	N	O	G	S	■	S	Y	N	C

Find more puzzles and this week's solution at
newyorker.com/crossword

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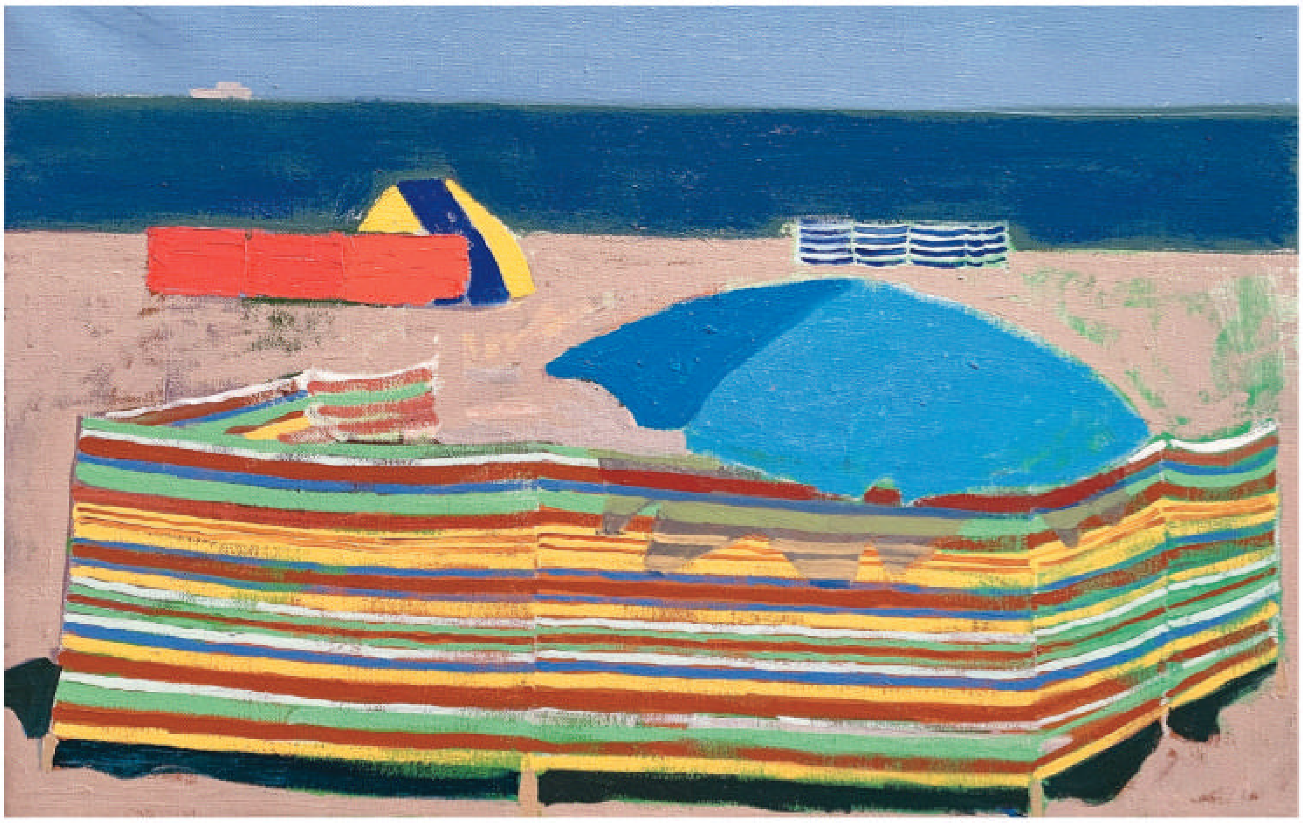
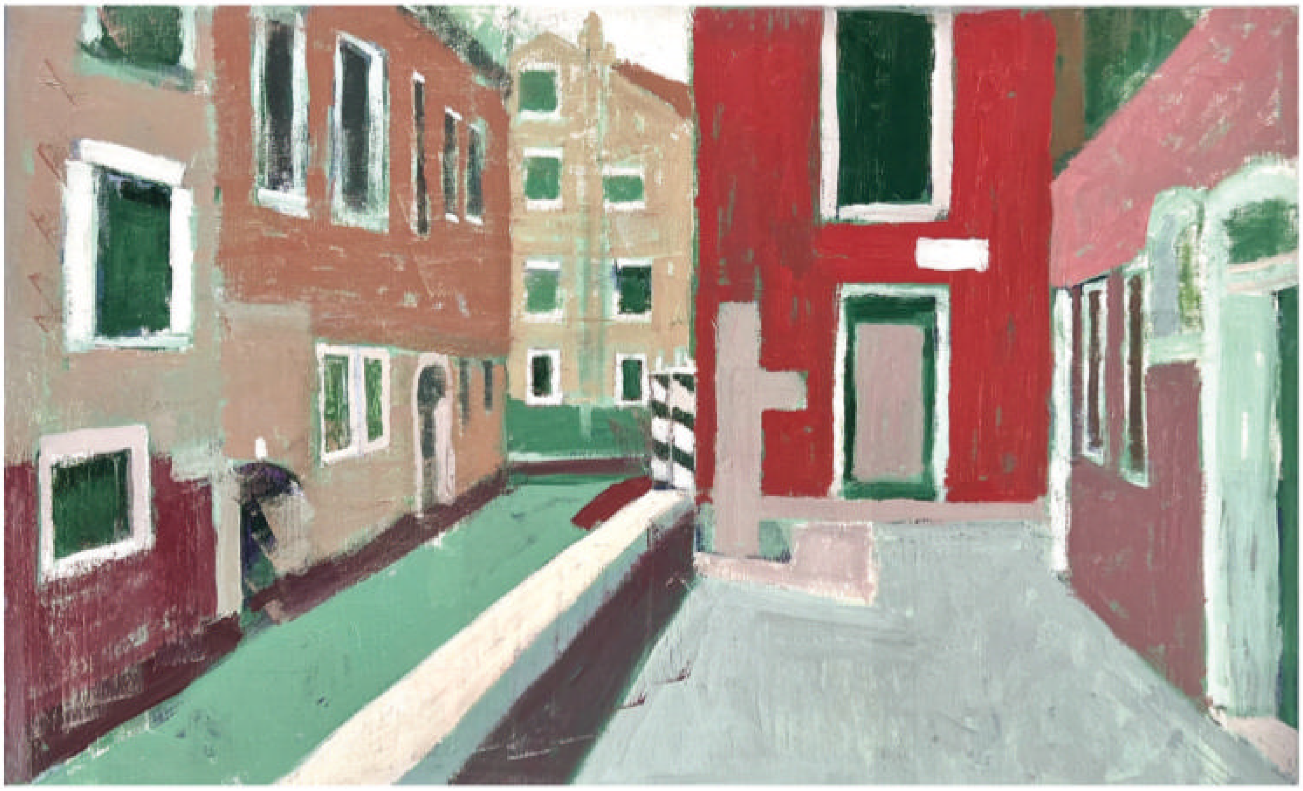


Mitchell Johnson

Paintings from Europe, New England, Newfoundland, California & New York



Mitchell Johnson's color- and shape-driven paintings have been exhibited alongside those of Georgia O'Keeffe, Milton Avery, Wolf Kahn, David Park, Wayne Thiebaud, Richard Diebenkorn, and Louisa Matthíasdóttir. In a 2004 review published in *ARTnews* magazine, the writer Susan Emerling described Johnson as "a devoted colorist able to extract visual tension from the world around him." Johnson (b. 1964) moved to California from New York City in 1990 to work for the artist Sam Francis. In New York, Johnson studied at Parsons School of Design with many former students of Hans Hofmann: Jane Freilicher, Leland Bell, Nell Blaine, Paul Resika, Larry Rivers, and Robert De Niro, Sr. Johnson adopted their reverence for art history and their emphasis on drawing and painting from life as the source of a personal direction. For a complete bibliography and exhibition history, visit www.mitchelljohnson.com.

Request a digital catalog of available work by email: mitchell.catalog@gmail.com. The recent paperback book, *Mitchell Johnson Nothing and Change*, is available at Amazon. Follow on Instagram: mitchell_johnson_artist.

Top: **Sopot (Stripes)**, 2019, 18 x 27 inches, oil on canvas. *Above:* **Venice**, 2023, 15 x 24 inches, oil on canvas. All images © 2023 Mitchell Johnson.